



NEXUS

NEW TIMES MAGAZINE

Volume 21, Number 6
October - November 2014
PO Box 30, Mapleton Qld 4560, Australia
Website: <http://www.nexusmagazine.com>

STATEMENT OF PURPOSE

NEXUS recognises that humanity is undergoing a massive transformation. With this in mind, NEXUS seeks to provide 'hard-to-get' information so as to assist people through these changes. NEXUS is not linked to any religious, philosophical or political ideology or organisation.

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GLOBAL NEWS

We report on electron-eating bacteria, Stonehenge's hidden landscape, IBM's "brain on a chip", cell towers' health dangers, terrorism hysteria, life-forms clinging to the International Space Station, the CDC whistleblower who confessed to MMR vaccine research fraud, the mercury link to autism, GM human organs, and more.

HOW THE MIND CHANGES GENES THROUGH MEDITATION

By Dr Mae-Wan Ho. The mind–body divide has been breached in conventional western medicine, thanks to new research findings in molecular genetics which not only bridge mind and body but also East and West.

SUGAR'S STAGGERING HEALTH CONSEQUENCES

By Dr Gary Null. Consumption of soft drinks and processed foods full of refined sugar is skyrocketing. Numerous studies point to serious health problems, including heart disease, diabetes, obesity, behavioural issues and cancer, caused by excessive sugar intake.

DIRECTED-ENERGY WEAPONS FOR POLITICAL CONTROL

By Elana Freeland. While the military–industrial complex has been creating ever more despicable ways to spy on and control citizens via the electromagnetic environment, we have bought into this nightmare with our increasing reliance on personal communication technology to the detriment of our health and freedom.

THE BENEFITS OF HIGH CHOLESTEROL

By Dr Uffe Ravnskov. Contrary to consensus thinking and propaganda linking low cholesterol with good cardiac health, numerous studies show that high cholesterol protects against cardiovascular disease, reduces susceptibility to infection, and promotes longevity.

SCIENCE NEWS

This edition, former nuclear weapons specialist Jeff Smith discloses now-declassified research on the magnetic buoyancy theory of gravity, explains how the Apollo Lunar Module really worked, and discusses electron disconnect and the anti-gravity effect of a nuclear fireball.

COSMONAUTS ON UFOS AND STRANGE PHENOMENA

By Paul Stonehill. Soviet and Russian cosmonauts have risked their careers by talking about unusual phenomena in space, ranging from UFOs, anomalous clouds and mysterious sounds to angelic beings, weird whispers that urge them to return to Earth, and an inexplicable scent.

CROP CIRCLES 2014: A MYSTERY HERE TO STAY?

By Andy Thomas. Predictions that crop circles would begin to vanish were not borne out in 2014, although the phenomenon gave Wiltshire, the usual hub of activity, a wide berth at first. As it turned out, another fascinating season of ingenuity ensued in England and beyond.

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Editor: Duncan M. Roads
email: editor@nexusmagazine.com



Editorial

It is probably fair to say that readers of NEXUS and similar publications share a desire to uncover information about what is *really* going on. While we cannot profess to know all such things, it is becoming easier to spot the omissions, distortions and lies that are put through the mainstream media.

I'm continually surprised at how many people remain unaware of the role that intelligence agents have played within the mainstream media and entertainment industry. The people who decided what news went to the editors and subeditors were spooks. The people who decided which TV shows were aired to the public were spooks. They were even at *Reader's Digest* in senior positions. They've been in all the commercial TV networks. There has *never* been freedom of speech in *any* country when it comes to the subjects that really matter.

And if it's not government spooks in control, it's people with a strong political or religious agenda. It's not so much that "they" tell you what to think, but what you are supposed to think *about*. Take a look around you in Aussie media and politics right now. See the Catholic Church avoiding scandal after paedophile scandal and see who is protecting it: Catholic politicians and Catholic journalists. Of course there is no Jesuit conspiracy in Australia—because the Jesuit journalists embedded in the mainstream media write articles to head off that perception. Will media barons ever figure out that their journalists have failed and lost the trust of their readers, listeners and viewers? All journalists out there *know* that they have failed the public on *every* important issue, from no weapons of mass destruction in Iraq to the tens of thousands dead from pharmaceutical scandals. It will get worse, as every government seeks to inhibit or punish anyone coming forward to blow the whistle on such information.

As usual, this issue of NEXUS contains yet more examples of what modern journalists *should* be reporting on, starting with what I consider to be one of the most important items we've ever published. This article in Science News confirms that *antigravity is positive magnetic buoyancy!* Indeed, I have it on good authority that scientists "conquered" gravity in the 1920s when they realised gravity's relationship to Earth's magnetic field lines. I've waited over 35 years for this bombshell moment!

When it comes to issues of public health and safety, modern journalists are quick to isolate and humiliate parents who ask questions about the safety of vaccines. But when a top scientist comes clean and admits to covering up data showing that MMR vaccinations are causing high rates of autism, where are the journalists? Oh, that's right: they're in South Africa, beating up some celebrity murder trial!

On the positive news side, though, we *are* seeing some progress. More and more scientists are uncovering the connection between our mind, consciousness and physical health. Not only can our conscious mind affect our autoimmune system, but our thinking and feeling patterns can affect our genes, as new evidence shows. It has been the mainstream science press lately which has written about the dangers of consuming the wrong fats, sugars and wheat. But considering that alternative media journalists have been publishing evidence about all this and more for over 30 years, in my opinion they still shouldn't rest on their laurels.

I hope you have another inspiring NEXUS read this issue. Until next time,

Duncan

Letters to the Editor ...

Sunlight, Vitamin D & EMFs

Dear Duncan: Thank you for your very thought-provoking articles. I would like to draw your readers' attention to a connection (healthwise) between a trio of those articles which many may not have made. These are your articles "Sulphate, Sleep, Sunlight and Glyphosate" by Dr Claire I. Viadro [21/05], "Wi-Fi Technology: An Uncontrolled Experiment" by Dr Marko Markov and Dr Yuri Grigoriev [20/06], and "The Power of UV Light and High-Dose Vitamin D3" by Jeff T. Bowles [20/04].

Dr Viadro succinctly explains Dr Seneff's research and the critical role of heparan sulphate in the brain, and the largely unknown multi-tasking jobs of the pineal gland to create such sulphate via sun exposure (vitamin D), "storing [supplies of sulphate] in heparan sulphate molecules" and then, as you sleep, "transporting [melatonin] as melatonin sulphate" (p. 20). So, daily sun exposure is vital.

Bowles equally succinctly demonstrates that vitamins D2 and D3 "are not really vitamins at all" but "are actually very potent hormones", that vitamin D was "mislabelled", and that vitamin D3 is "a hormone that provides information to the DNA in every cell in your body" and "is estimated to control at least 1,000 different genes by either turning them on or turning them off" (p. 32). So, again, daily sun exposure really is vital.

Now comes the next interesting bit when Markov and Grigoriev explain that Soviet magnetobiologist Kholodov pointed out that "the entire biosphere is immersed in an ocean of electromagnetic waves" (p. 15) and that Wi-Fi radiation in particular can penetrate deeply into brain tissue, causing cumulative damage. So, what has one to do with the other?

The answer lies in the work of Barry Wilson and Dick Stephens, of the Battelle Memorial Institute in the USA, which explains how the brain is being fooled by man-made frequencies because it can't interpret light frequencies and electromagnetic frequencies as being different.

The really important part of their discovery is that the brain can't tell the difference between radio waves (artificial electric fields) and natural light waves—thereby sensing at night that light is still there and switching off the pineal gland's production/ transportation of melatonin. You see, you think you're asleep but your brain thinks you're still at the beach.

There is now actually any number of research findings to support this as fact. Almost conclusively, electromagnetic waves switch off melatonin production and, as Viadro and Bowles show, no carrier, no melatonin, no heparan sulphate and you've got big problems.

You can stay out in the Sun all day long, folks, but surround yourself with EM waves at night and, as this research shows, it not only won't do one bit of good but it will cause you all sorts of health problems affecting the DNA in every cell in your body. Just imagine it: a thousand different haywire genes— "Monty Python" in your body!

Peter R. M., Maleny,

Queensland, Australia

Homeopathy and Water

Dear Duncan: I just want to pass on a few thoughts about homeopathy. I have enjoyed many of your articles about the efficacy of homeopathy and the structure of water. Whether the placebo effect is part of this or not in humans is uncertain, but surely it has no effect upon animals.

The point I wish to make regards mainstream science's dismissal to give the subject any credence. I suspect that any so-called official recognition of its validity in any way would bring about a massive increase in costs to water utilities and drinks manufacturers.

Also, if what is effectively programmed water can have such an influence as suggested by homeopathic studies, then it would be the ideal way of delivering whatever pattern or influence that is required upon the human system. With the increasing scarcity and disappearance of fresh water in many areas, this could easily be used as a means of control.

Perhaps the war on water and all of those who need it is further down the line than we would like to think.

Keep up the great work.

Patrick S.,

Norwich, UK

Paranormal Phenomena

Hello, NEXUS Magazine! I would like to congratulate you on being such an educational magazine that brings truth to a world full of historical lies and conspiracies.

Anyway, I was wondering why there has never been an article on the origin of black magic, voodoo spells and the like. How do these paranormal phenomena work? Can science ever be able to quantify and explain their inner workings? Are voodoo and black-magic spells the products of the dead realm?

Please publish an article on these subjects. I look forward to hearing from you.

Daniel P.,

Toronto, Canada

[Dear Daniel: I guess the question for most is whether such "workings" are subjective or objective experiences. Thanks for the request; I'm sure something will eventuate soon. Ed.]

MMR Vaccine-Autism Link

Dear Editor: The controversy concerning a link between vaccines and autism has taken a new turn with explosive news of a cover-up through the deliberate omission of data from a 2004 study. The omission obscured the finding that African American boys who had received the MMR [measles, mumps, rubella] vaccine before the age of 36 months had a 236 per cent higher rate of autism than those who had not.

Dr William Thompson, a Senior Scientist with the Centers for Disease Control (CDC) in the USA and one of the authors of the study, has reportedly turned whistleblower and issued a public statement through Morgan Verkamp, LLC, a law firm renowned for representing whistleblowers. His startling revelation outlines the data's omission and significance.

Dr Thompson has also reportedly made a personal apology to Dr Andrew Wakefield, acknowledging that Dr Wakefield's career "was unjustly damaged and this study would have supported his scientific opinion".

In addition, it has been confirmed by a spokesman for US Congressman Bill Posey that a large amount of documentation relating to the issue has been received from Dr Thompson and that they are in the process of going through it all.

Lawmakers have previously questioned the wisdom of having the CDC oversee vaccine research, safety and promotion, especially with such strong ties between the agency's advisory panel and the pharmaceutical industry.

Members of the Australian Vaccination-skeptics Network, Inc. have noted the prominence and frequency with which major media in this country have joined in condemning Dr Wakefield without confirmed evidence and in promoting the view that *The Lancet's* politically driven withdrawal of Dr Wakefield's case series report negated all evidence of an MMR-autism connection.

Tasha David,

President, Australian Vaccination-skeptics Network, Inc., avnquiries@gmail.com

The UFO Cover-up

Hi Duncan: You have a great magazine which is always a thought-provoking read.

I have followed the UFO story for many years and, like many, can't sort out the possible truth from the government conspiracy and disinformation. My belief in UFOs has been shaken by this story, and neither WikiLeaks nor the Snowden leaks have provided any smoking-gun evidence of an international cover-up.

Maybe it is a case of double bluff and they are sitting on something, but without that breakthrough evidence we have been promised for so long, but never arrives, perhaps we will never know. What do you think?

Phil W. (a sceptic who wants to believe),

UK

[Dear Phil: All indications are that the security clearance levels required for anyone to be in the "UFO loop" are a lot higher than those required to access any of the WikiLeaks or Ed Snowden material that's been released so far. Ed.]

Cosmonauts and Shamans

Greetings and best wishes, Duncan and co.! Kudos for the variety of topics.

In relation to the article "Revelations of the Cosmonauts" (21/05), Paul Stonehill mentions on p. 59 the "phenomenon of such fantastic states of consciousness" that many cosmonauts experienced.

The descriptions of these states, to me at least, bear all the hallmarks of a "shamanic journey".

Entoptic phenomena (flashes, lights, phosphenes), animalistic self-images, communication and interaction with other beings on/in other worlds/dimensions, fantastic adventures, etc., are all classic "symptoms" of the shaman's journey. (Very good summaries and analyses of these states of consciousness can be found in such books as Graham Hancock's *Supernatural*, Dr Richard Strassman's *DMT: The Spirit Molecule* and Michael Harner's *Cave and Cosmos*.)

With this in mind and after consideration of Dr Strassman's medical studies of DMT, it appears likely that these states can be initiated and/or modulated by the effect of space travel on the pineal gland (where DMT synthesis is highest). This combination (space travel and DMT) is ripe for study and may further enhance our knowledge of the spirit molecule's effect on us. (This also may apply to near-death experiences and nonphysical UFO encounters.) DMT and variables, in high-enough doses to bring on these states, can be obtained from various plant species (fungi, barks, vines, berries, etc.). DMT appears to be in every life-form, in every cell, yet it concentrates in us in the pineal gland which sits directly above the spinal column route (which facilitates its bodily dispersion).

Furthermore, the effects of magnetic field variances and changes to our state of consciousness are also documented and are part of the overall phenomenon (refer to Persinger *et al.*). Whether these field changes affect the pineal DMT level is unknown at this stage. Whether this field change is another entry point or portal altogether is a possibility which also needs study. (Research indicates that there may be many ways to "enter" these states.)

Having experienced these "fantastic states" (via fungi and meditation), I can attest to their awesomeness and the cosmonauts' desire to "crave them constantly" as well as the withdrawal after-effects (p. 59). The cosmonaut Krichevsky noted that he thought that "the space environment is toxic and contains some unknown hallucinogen" (p. 60). I think the hallucinogen may be much closer to us than that.

Thanks for allowing me to share my thoughts.

Robert R.



ELECTRON-EATING BACTERIA DISCOVERED

Microbiologists based in California have discovered bacteria that survive by eating pure electrons rather than food, bringing an entirely new method of existence to awareness and raising questions about the possibilities for alien life.

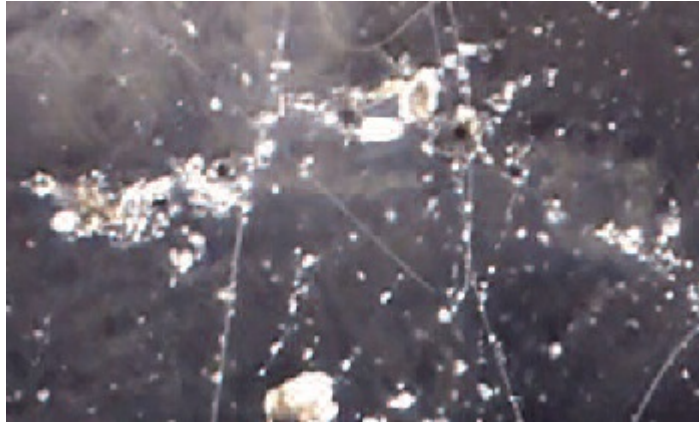
The "electric bacteria", as they have been dubbed by the team that discovered them, take energy from rocks and metal by feasting directly on their electrons.

The biologists from the University of Southern California (USC) found that the new discovery joins more than 10 other different specific type of bacteria that also feed on electricity—although none in quite the same way.

Talking to *New Scientist* magazine, Dr Kenneth Nealson of USC explained the process by which the bacteria function. "You eat sugars that have excess electrons, and you breathe in oxygen that willingly takes them," he said. Human cells break down the sugars in order to obtain the electrons—making the bacteria that only absorb the electrons that much more efficient. "That's the way we make all our energy and it's the same for every organism on this planet," he added.

Some of the bacteria even have the ability to make "bio-cables", a kind of microbial collection of wires that can conduct electricity as well as copper—renowned for its high electrical conductivity.

Dr Nealson's PhD student Annette Rowe has identified some eight different kinds of the bacteria. (Source: *RussiaToday.com*, 19 July 2014, <http://tinyurl.com/oawe5ba>.)



Electric bacteria connect to form wires.

(Source: Image taken from video uploaded to YouTube by *New Scientist* magazine.)

STONEHENGE SURROUNDED BY MYSTERIOUS BURIED MONUMENTS

The landscape around Stonehenge has yielded hidden treasure: 17 previously unknown monuments, a "house of the dead" pre-dating the stone circle, and what appears to be a ceremonial route around Stonehenge itself.

Archaeologist Vincent Gaffney, of the University of Birmingham, and colleagues have produced a detailed map covering 12 square kilometres around Stonehenge. No excavation was involved. Instead, Gaffney's team spent four years surveying the landscape with magnetometers, radar, electrical resistance measurements and lasers, creating a detailed picture of what lies below the visible landscape.

One of the most striking discoveries is also one of the oldest: a long burial mound dating from before Stonehenge was built. The mound was built over the remains of a huge, 6,000-year-old timber building.

The nearby Durrington Walls "super henge" holds even more secrets. At almost 500 metres across, it is one of the biggest earthworks of its kind. Gaffney's team has found evidence that early in its history it was flanked by a row of around 60 huge stones or posts up to three metres high.

The team also found many ditches and paths running across the landscape, including two five-metre pits that form a gigantic triangle with Stonehenge. A person walking the paths between them would have experienced a spectacular succession of sights.

(Source: *NewScientist.com*, 13 September 2014, <http://tinyurl.com/of9wr6p>)

AUSTRALIA AND EUROPE HAVE TOO MUCH POWER!

Australia faces an unprecedented oversupply of energy, according to the Australian Energy Market Operator in a press release of 8 August. "For the first time in the history of the National Electricity Market (NEM), no new thermal baseload electricity generation is required over the next decade to maintain system reliability, due to the continuing decline in electricity consumption."

That decline is due to a convergence of several factors: greater energy efficiency, more rooftop solar, and the recession that heavily impacted manufacturers which use lots of electricity.

Observers speculate that the country's existing coal-fired plants may no longer be viable and that the government's renewable energy targets may be too high. Prime Minister Tony Abbott's conservative government has already repealed the country's carbon tax. Now it is eyeing a reduction in its renewable electricity mandates.

Meanwhile, European utility RWE AG now says that it will close 13 unprofitable fossil-fuel power plants, three more than previously announced. The reason, according to the *Wall Street Journal*, is that "subsidized renewable energies have created an electricity glut in Europe".

RWE's biggest rival, E.ON SE, had already announced widespread plant closures due to the oversupply situation.

In a statement of 14 August, RWE said: "The ongoing expansion of renewable energy is increasingly leading to

reductions in the utilisation of conventional power plants. At the same time, wholesale prices for electricity have been in freefall for some time, and are now at only around 3.5 cent[s] per kilowatt hour."

(Source: *SmartGridNews.com*, 22 August 2014, <http://tinyurl.com/mfh4zn7>)

MODULATING YOUR OWN IMMUNE RESPONSE

In a recent study published in the scientific journal PNAS, researchers from the Radboud University Nijmegen Medical Centre in the Netherlands have provided the first scientific evidence that, with the help of simple techniques like breathing exercises, meditation and repeated exposure to cold, you can activate the autonomic nervous system and change the response of your immune system.

Until now, both the autonomic nervous system and innate immune system were regarded as systems that cannot be voluntarily influenced.

The study demonstrates that, through practising techniques learned in a short-term training program, the sympathetic nervous system and immune system can indeed be voluntarily influenced.

This study could have important implications for the treatment of a variety of conditions associated with inflammation, especially autoimmune diseases in which therapies that antagonise pro-inflammatory cytokines have shown great benefit. (Source: *ScienceDaily.com*, 5 May 2014, <http://tinyurl.com/l299kdw>)

IBM'S BRAIN ON A CHIP

Scientists at IBM Research have created by far the most advanced neuromorphic (brain-like) computer chip to date. The chip, called TrueNorth, consists of one million programmable neurons and 256 million programmable synapses across 4,096 individual neurosynaptic cores. Built on Samsung's 28-nm process technology and with a monstrous transistor count of 5.4 billion, this is one of the largest and most advanced computer chips ever made.

Perhaps most importantly, though, TrueNorth is incredibly efficient: the chip consumes just 72 milliwatts at maximum load, which equates to around 400 billion synaptic operations per second per watt. It's about 176,000 times more efficient than a modern CPU running the same brain-like workload, or 769 times more efficient than other state-of-the-art neuromorphic approaches. Yes, IBM is now a big step closer to building a brain on a chip.

TrueNorth is the culmination of the six-year-old SyNAPSE project at IBM Research. The work has been partly funded by DARPA since 2008. (Source: *ExtremeTech.com*, 7 August 2014, <http://tinyurl.com/ntwsmu6>)

CELL TOWERS AND HEALTH

Studies find that people living near a base station experience fatigue, headache, sleep disruption, irritability, depression, decreased libido, memory loss, dizziness, nausea, increased risk of cancer, tremors, loss of appetite, rashes, visual disruptions and overall discomfort.

People who live within 350 metres of a cellular antenna for more than a decade experience a fourfold increase in cancer rates. Among women, the increase is tenfold. People who live within 200-500 feet [~61-152 metres] of an antenna report: genetic, growth and reproductive effects; increases in the permeability of the blood-brain barrier; behavioural, molecular, cellular and metabolic effects; and an increased risk of cancer.

In Brazil, from 1996 to 2006, researchers tracked people who lived within 500 metres of a base station. They found 34.76 deaths by neoplasia (some kind of tumour) per 10,000 inhabitants. Outside of this area, a decrease in the number of deaths by neoplasia occurred: the greatest incidence was 5.83 deaths per 1,000 people.

In Israel, living near a cellular antenna for one year led to a dramatic increase of cancer. The increase correlates with previous data on a significant increase in leukaemia among people who live near broadcasting towers in Honolulu and Hawaii.

Egyptian researchers found that long-term (six years) exposure to cellular antennas and mobile phones negatively impacts human hormone profiles: cortisol, serum progesterone (in females) and thyroid hormones are all affected.

After a cellular antenna was installed in Rimbach, a small town in Bavaria, Germany, 60 residents had their urine tested regularly over 18 months, beginning in spring 2004. Participants' stress hormones (adrenaline and noradrenaline) increased significantly; their dopamine and phenylethylamine levels decreased substantially. While participants maintained their usual lifestyle, they experienced increases in sleep problems, headaches, dizziness,

concentration problems and allergies. Because chronic disruption of hormones damages health in the long run, researchers expect "major health problems" from long-term exposure to radiation from cellular antennas. (Source: From Katie Singer's *An Electronic Silent Spring, 2014* [see review in this issue], <http://www.electronicssilent.spring.com>, extract at <http://tinyurl.com/k6taxkl>)

USING ANIMALS IN TOXICITY TESTS CAN'T BE JUSTIFIED SCIENTIFICALLY OR ETHICALLY

An Analysis of the Use of Animal Models in Predicting Human Toxicology and Drug Safety, published in the scientific journal *ATLA* [2014; 42:181-199], has studied the largest database of animal toxicity studies yet compiled and used the most appropriate statistical methods to determine the evidential weight provided by animal data to the probability that a new drug might be toxic in humans.

The authors, Dr Jarrod Bailey, Michelle Thew and Professor Michael Balls, conclude that "preclinical testing of pharmaceuticals in animals cannot currently be justified on scientific or ethical grounds".

According to Helen Marston, CEO of Humane Research Australia: "Biological differences—anatomical, genetic and metabolic—between humans and other animals are reasons that data cannot be extrapolated from animal tests to humans with sufficient accuracy. Not only are animal tests a cruel method of research, they are essentially a waste of precious resources. The research community urgently needs to adopt more reliable testing methods that will not only eliminate the suffering of animals, but will be more predictive of human outcomes."

Co-author Dr Jarrod Bailey said: "Our study... shows that animal tests of new drugs can't be justified on scientific, as well as ethical, grounds. If a new drug appears safe in tests on dogs, rabbits, rats or mice, this provides, at best, negligible additional evidence of safety in humans. To protect and serve the public, drug developers must move away from animal tests towards alternatives that are scientifically superior, as well as more humane, as a matter of urgency.¹ (Source: *Humane Research Australia*, 7 August 2014, www.humaneresearch.org.au)

THE DECEIT AT THE HEART OF THE TERRORISM HYSTERIA

A key argument advanced both by neoconservatives who want further military intervention in Iraq and by surveillance advocates anxious to justify further state intrusions on individuals' rights is that terrorism is on the rise.

"Deaths from terrorism worldwide rose by more than 60 per cent last year," the UK *Telegraph* reported in May. "Terrorist attacks rose 43% worldwide in 2013," the *Guardian* revealed. A rise the year before had already been used by Australian security industry apologists to justify more spending.

And there was indeed a surge in terrorist incidents in 2012 and 2013, from around 5,000 attacks in 2011 worldwide to nearly 8,500 in 2012 and nearly 12,000 in 2013—making those three years the biggest ever recorded for terrorism.

But break down the data and a more complicated story emerges. If you split the data between western countries and non-western countries, it immediately becomes apparent that the vast bulk of the increase occurred outside the West.

In 2013, terrorism in western countries rose from 140 incidents to over 250 incidents, but terrorism outside the West rose from over 8,000 to over 11,000 incidents.

But what about the rise in terrorist attacks in western countries? Is that not evidence of the greater threat to our security from Islamic militants, and thus the need for ever more surveillance, ever more spending on security and ever more draconian laws to address the insidious threat of Muslim extremists?

Alas, no: the bulk of the rise in terrorism in western countries occurred in just two places: Northern Ireland and Greece. In Northern Ireland, terrorist incidents increased from 45 each in 2011 and 2012 to 117 in 2013, driven by dissident republicans. The number of incidents in Greece more than doubled from 22 to 53 in 2013, the upsurge driven by austerity-induced violence by both Left and Right.

And despite the big rise in terrorist incidents in the West, fewer people than ever are dying as a result of terrorism: there were just 12 recorded fatalities in all western countries from terrorism last year, including two in Northern Ireland and two in Greece. That's a fall from 17 the year before, and a big fall from 79 in 2011 when neo-Nazi Anders Breivik killed 77 people in Norway.

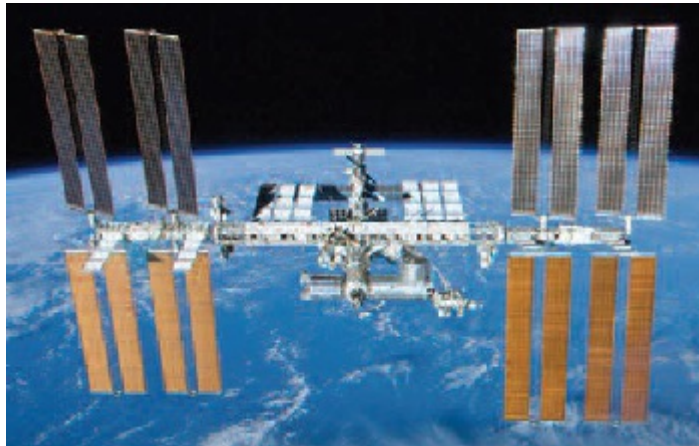
The story's different outside the West: the number of victims of terrorist attacks has risen along with the number of attacks. The number of non-western victims reached its highest ever level in 2013, with over 22,000 fatalities (including perpetrators). Most of the rise has been in Iraq, where the death toll has increased massively, from just

under 2,700 to over 7,000.

So the rise in "terrorism" in the West being used to justify yet another security crackdown in western countries has virtually nothing to do with Islamist militants, involves few instances of lethal attacks, and is part of a long trend toward less, and less effective, terrorism.

(Source: Bernard Keane, *Crikey Insider*, 9 September 2014, <http://www.crikey.com.au>)

MYSTERY ORGANISMS FOUND CLINGING TO INTERNATIONAL SPACE STATION



During a spacewalk intended to clean the International Space Station (ISS), Russian astronauts took samples from the exterior of the station for a routine analysis.

The results of the experiment were quite surprising. Astronauts expected to find nothing more than contaminants created by the engines of incoming and outgoing spacecraft, but instead found that living organisms were clinging to the outside of the ISS.

The astronauts identified the organisms as sea plankton that likely originated from Earth, but the team couldn't find a concrete explanation as to how these organisms made it all the way up to the space station— or how they managed to survive.

The bigger mystery is not that the plankton survived, but how they made it all the way up there, 205 miles [330 kilometres] above Earth. The scientists have already dismissed the possibility that the plankton were simply carried there on a spacecraft from Earth, as the plankton aren't from the region where any ISS module or craft would have taken off.

(Source: *ExtremeTech.com*, 22 August 2014, <http://tinyurl.com/pdtmvtl>)

CDC WHISTLEBLOWER CONFESSES TO MMR VACCINE RESEARCH FRAUD

Scientist Dr William Thompson has gone public with a statement that opens with a blatant admission of scientific fraud at the US Centers for Disease Control (CDC):

"My name is William Thompson. I am a Senior Scientist with the Centers for Disease Control and Prevention, where I have worked since 1998.

"I regret that my coauthors and I omitted statistically significant information in our 2004 article published in the journal *Pediatrics*. The omitted data suggested that African American males who received the MMR vaccine before age 36 months were at increased risk for autism. Decisions were made regarding which findings to report after the data were collected, and I believe that the final study protocol was not followed."

There are four realisations that stem from Dr Thompson's statement.

First, it underscores the fact that the alternative media broke this story, pre-empting the *New York Times*, *Washington Post* and every Pulitzer Prize-winning journalist.

Second, it shows that CDC scientists did in fact conspire to alter the study data in order to bury significant results

linking the MMR [measles, mumps rubella] vaccine to heightened autism risk in African American children.

Third, it means that the 2004 study referenced in all this should be immediately retracted.

Fourth, the media and medical establishment owes an apology to Dr Andrew Wakefield, whose career and reputation were destroyed after he raised the alarm over links between autism and MMR vaccines.

If the CDC were honest with the public, then parents could make informed decisions about what level of risk they wish to undergo. Is it worth vaccinating a child against measles if the risk of that child becoming autistic is one in 100,000? How about one in 1,000? What if it's actually more like one in 250?

The public has never been allowed to know these numbers because people like Dr William Thompson conspired to commit scientific fraud and bury these numbers. And that's the point in all this.

If vaccines were honestly marketed with credible descriptions of their inherent risks, thereby allowing parents to make informed decisions about those risks, there would probably be very little resistance against them. And if all the toxic preservatives and adjuvants were removed from vaccines, there might not be any resistance at all.

The CDC, through precisely the kind of scientific fraud which Dr Thompson has admitted to, has become its own worst enemy by actively deciding to lie to the public for decades through the deliberate commission of scientific fraud. (Source: *NaturalNews.com*, 27 August 2014, <http://tinyurl.com/jwl8k9t>)

CHEMISTRY EXPERT LINKS MERCURY IN VACCINES TO AUTISM

A retired professor of chemistry from the University of Kentucky has come out in condemnation of mercury in vaccines, corroborating information released by CDC whistleblower Dr William Thompson. Dr Boyd Haley says that thimerosal, the ethylmercury-based preservative commonly used in vaccines, is lethal to all forms of life and should never be injected into a human being, especially a baby.

According to Dr Haley, ethylmercury also has a particular affinity for testosterone, becoming increasingly more toxic in its presence compared to when it encounters oestrogen.

This seems to explain why boys are about five times more likely to develop autism than girls, and further validates the connection between exposure to mercury and an increased risk of neurological disease.

"[The CDC is] not being very honest with the American public about what might be causing the epidemic of autism in the United States," he said. "[W]e have the highest rate and the earliest vaccines given in the world, and yet on the infant mortality list we're at the very top. Our children die at a higher rate of disease...than any other country of 43 modern countries."

(Source: *NaturalNews.com*, 3 September 2014, <http://tinyurl.com/lk4k56e>)

GM "MINI-HUMANS" TO BE FARMED FOR DRUG TESTING

Scientists are developing artificial humans in the same vein as genetically modified (GM) plants, in the hope that these creations will replace the need for using animals in laboratory testing.

By 2017, artificial humans will be "farmed" with interacting organs that can be used in drug tests, speeding up the approval process by the Food and Drug Administration and other government regulators.

The GM humans will contain smartphone-sized microchips that will be programmed to replicate up to 10 major human organs. Each GM human will be tiny, roughly the size of a microchip itself, simulating the response of humans to substances inhaled, absorbed in the blood or exposed to in the intestinal tract.

Early versions comprising an artificial kidney, heart, lung or gut are already being used by the cosmetics industry and to observe the use of chemical drugs on non-GMO humans.

Dr Uwe Marx, a tissue engineer from Technische Universität Berlin and founder of TissUse, a firm developing the technology, said: "If our system is approved by the regulators, then it will close down most of the animal-testing laboratories worldwide."

Currently, this type of technology is already being used on artificial organs like hearts and livers, but the results must be verified on a "live¹ being—animals in a laboratory, for instance—to prove that substances are safe when interacting with a living being with real organs.

The new GM-human farms seem great on paper, since eliminating animal testing is indeed noble, but the possible far-reaching, negative ramifications of trying to recreate the complexities of Mother Nature's form have not been addressed. (Source: *NaturalSociety.com*, 12 September 2014, <http://tinyurl.com/k2go84g>)

THE HYPNOTIC POWER OF GERM PROPAGANDA

by Jon Rappoport

Time and time again, over the years, we hear about new germs and old germs and "mystery germs" that are afflicting people, suddenly, in various parts of the world. And this news is met with nearly universal faith. Yes, there must be a germ. It must be what's making people ill. Really? Why?

I took my first serious germ-foray when I was writing my book *AIDS Inc.* in 1987. To my shock, I discovered that, even by the conventional rules of disease causation, there was no reason to infer that something called HIV was causing something called AIDS. Going a step further, I investigated every so-called high-risk group and found non-germ causes that accounted for all the symptoms of what was being called AIDS. Without HIV as the lynchpin welding all these risk groups together, "AIDS" was immune-system failure resulting from a variety of causes—not *one* cause.

The biggest reason for T-cell depletion on the planet? Malnutrition!

But people are fascinated by germ stories. They love them, they fear them, they add their own wrinkles, they behave as if they're in a theatre watching a horror movie.

When the dreaded SARS epidemic made global headlines in 2003, the germ was the "coronavirus". Dr Frank Plummer, a Canadian microbiologist working for the World Health Organization, achieved a few moments of honesty when he told reporters that, strangely enough, he was seeing fewer people with SARS who "had the coronavirus". Eventually, Plummer said, almost none of the people being diagnosed with SARS had the coronavirus—which is exactly like saying: "They're all suffering from disease X, except none of them has what causes disease X."

Six years later, in 2009, there was the fabled swine flu H1N1 pandemic, another dud. Sharyl Attkisson, writing for CBS, and Peter Doshi, writing at BMJ Online, exposed the swine flu fraud: most people across the US who were "likely swine flu cases" didn't have the H1N1 virus. That's what lab tests revealed. Obviously, for both SARS and swine flu, doctors were making eyeball diagnoses based on "typical flu symptoms".

The public wrongly believes that, when doctors and medical bureaucrats say there is an outbreak of a virus, accurate tests are being done on every patient to confirm the presence of the virus. Because tests aren't being done, it's the easiest thing in the world to take numbers of sick people who display very general similar symptoms and claim that all these people have the same disease caused by the same germ.

In the fall of 2009, during the "swine flu crisis", Attkisson was shut down at CBS. Her investigation was drilling too deep. She revealed that the CDC [Centers for Disease Control] had stopped counting the number of swine flu cases in America. The overwhelming number of lab tests on Americans who were suspected of having swine flu were coming back negative. The tests showed no sign of the H1N1 virus, the supposed cause of swine flu. It was even worse than that. Those tests couldn't find evidence of *any* type of flu virus. Back up and think about that.

One of the consequences: even for people who believed in flu vaccines, there was a huge and embarrassing problem. How could these vaccines make a difference if what was being called the flu wasn't flu at all? To this, many people would respond: "I don't understand. If people are sick, the cause has to be a germ."

No. There are many reasons for illness. Don't automatically buy into the "germ-language horror movie".

(Source: from Jon Rappoport's Blog at his website *NoMoreFakeNews.com*, 9 September 2014, <http://tinyurl.com/puc59fa>)

How The Mind Changes Genes Through Meditation

The mind-body divide has been breached in conventional western medicine, thanks to new research findings in molecular genetics which not only bridge mind and body but also East and West.

by Mae-Wan Ho, PhD

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Website: <http://www.i-sis.org.uk>

Web page: <http://tinyurl.com/jvglwqp>

Psychosomatic is Real

Conventional western science and medicine has long held that one's mind or psychological state cannot have physical effects on the body—so much so that subjective feelings of being ill are generally dismissed as "psychosomatic" and hence not a real indicator of how physically unwell the body is. This mind-body divide has truly broken down, as researchers are identifying hundreds and thousands of genes that are affected by our subjective mental states. Feeling constantly sad and depressed can genuinely turn on genes that make us physically unwell and prone to viral infections and chronic diseases, just as feeling particularly relaxed and peaceful can turn off those genes and activate others that help us heal and fight infections.

The emerging field of human social genomics is demonstrating that social conditions, especially our subjective perceptions thereof, can radically change our gene expression states. This has opened up new ways of intervention.

Integrative Medicine's Focus on Disease Prevention

In the United States and other industrialised countries, "integrative medicine" is becoming increasingly important in healthcare delivery in its focus on disease prevention and amelioration through healthy diet, lifestyle, stress management and cultivation of emotional wellbeing. Among the most popular approaches in integrative medicine are traditional deep-relaxation techniques referred to as "yogic/meditative practices", which include yoga and diverse meditation and breathing exercises such as qigong, tai chi, etc.

Over the years, many studies have suggested that such practices have positive effects on the mind-body system and can increase wellbeing and support recovery from disease. Yogic/meditative practices were shown to have positive effects on heart rate, blood pressure and low-density lipoprotein cholesterol and to decrease levels of salivary cortisol, the stress hormone. These findings are consistent with a down-regulation of the hypothalamic-pituitary-adrenal (HPA) axis and the sympathetic nervous system, both of which are known to be overactivated by the stressful western lifestyle.

Now, a series of new studies on gene expression profiles in immune cells circulating in the blood are showing that yogic/meditative practices have profound effects at the molecular level.

Mind Over Body as Revealed by Gene Expression Profiles

The first study that used gene expression profiles to probe the effects of meditative practices was small but in depth. The neutrophils (one kind of white blood cells) of five Asian qigong practitioners were compared with six healthy Asian controls.

The qigong group had practised for at least a year, their regimen consisting of a cognitive component in addition to exercise that lasted for one to two hours daily. Gene expression profiles were examined with microarrays for about 12,000 genes. Among them, 250 genes were consistently different between the qigong and the control groups, with 132 down-regulated and 118 up-regulated. Among the differentially expressed genes, the down-regulated included genes related to the ubiquitin degradation pathway (for breaking down proteins) as well as genes encoding ribosomal proteins. Cellular stress-response genes were generally down-regulated in qigong practitioners compared with controls, but the expression of two heat-shock proteins was increased. Expression of genes related to immunity was also increased in the qigong group—genes such as interferon *gamma* (IFN γ) and IFN-related and IFN-regulated genes (involved in fighting viral infections). In an *in vitro* assay, the neutrophils from qigong practitioners had increased bactericidal activity.

Furthermore, the lifespan of normal neutrophils was increased while that of inflammatory neutrophils was decreased through apoptosis.

A second study is particularly interesting. It evaluated gene expression changes triggered by the "relaxation response" (RR), characterised by decreased oxygen consumption, increased exhaled nitric oxide and reduced psychological distress. The practices were quite diverse, ranging from Vipassana or insight meditation, mantra

meditation and Transcendental Meditation, to breath focus, Kripalu or Kundalini yoga and repetitive prayer. The study included 19 long-term (average 9.4 years of practice) RR practitioners (group M) and 20 healthy controls tested at baseline (group N1) who underwent eight weeks of training in guided relaxation techniques and were tested again (group N2). Peripheral blood mononuclear cells (PBMC, all blood cells having a round nucleus) were isolated and global transcriptome (totality of transcripts) profiles were determined using microarrays that could probe 47,000 genes and gene variants.

A total of 2,209 genes were differentially expressed between groups M and N1: 1,275 up- and 934 down-regulated. Between groups M and N2, 1,504 genes were differentially expressed: 774 up- and 730 down-regulated. Between N1 and N2, 1,561 genes were differentially expressed: 874 up- and 687 down-regulated. Interestingly, 595 genes were differentially expressed, specifically in group M, suggesting that longterm practitioners of RR give a distinct expression profile.

Similarly, 428 genes were shared between the short-and long-term RR groups (N2 and M) but not with the control N1 group. The type of genes differentially expressed suggested to the authors that gene expression changes in the M and N2 groups might indicate a greater capacity to respond to oxidative stress and associated detrimental effects. And it matters little which RR technique is practised.

The third study investigated changes in gene expression by Sudarshan Kriya (a kind of yoga) and associated practice. It included 42 practitioners and 42 healthy normal controls. RNA was isolated from PBMC and subjected to reverse transcription polymerase chain reaction (RT-PCR) analysis with a focus on genes involved in oxidative stress, DNA damage, cell-cycle control, ageing and apoptosis. In parallel, the blood drawn was assayed for glutathione peroxidase, superoxide dismutase (SOD) and glutathione levels.

Consistent with a previous study, glutathione peroxidase and superoxide dismutase activities and glutathione levels were higher in practitioners compared with controls. Consistent with those findings, glutathione S-transferase mRNA was also significantly higher in practitioners compared with controls. Although not statistically significant, similar increases were found in the antioxidant genes Cu-Zn-SOD and Mn-SOD, glutathione peroxidase and catalase.

In addition, expression of the anti-apoptotic gene COX2 and stress response gene HSP70 were significantly increased in the practitioners. Thus the authors suggested that the meditative practice might result in a better antioxidant status, at least in part, by changes in the expression of the relevant genes, which may translate to better response to environmental stress.

All three studies suggest that yogic/meditative practice gives rise to gene expression changes consistent with improved response to environmental stress, improved survival of immune cells and improved antioxidant status.

Meditation Overcomes Effects of Loneliness

Lonely older people have increased expression of pro-inflammatory genes and increased risk of illness and death. Behavioural treatments to reduce loneliness and health risks have had limited success. A study was carried out to test how eight weeks of a mindfulness-based stress reduction (MBSR) program compared to a wait-list control group (a group of participants assigned to a waiting list for intervention and acting as the control group for the intervention).

Feeling lonely is a significant risk factor for cardiovascular disease, Alzheimer's disease and death from all causes.

Several previous studies suggested that MBSR may reduce protein biomarkers of inflammation, and inflammation is known to play a major role in the development and progression of many diseases in older people. Research findings also showed that immune cells from lonely older people have increased expression of genes involved in inflammation.

Randomised participants of 40 healthy older adults (aged 55-85 years) not taking any medication and not trained in MBSR were recruited via newspaper advertisements from the Los Angeles area.

The sample was 64% Caucasian, 12% African American, 10% Latino, 7% Asian American and 5% other, and predominantly female (33). They were randomly assigned to intervention and control groups, which did not differ significantly on measured demographic characteristics at baseline.

Six participants (15%) dropped out before completion, five from the intervention group and one from the control group. Fifteen completed the MBSR program and showed significant decreases in loneliness from baseline compared to a small increase in loneliness from baseline in the control group. There was no significant difference between the groups at baseline.

Previous research found that loneliness was related to increases in expression of NF- κ B (nuclear factor *kappa*-light-chain-enhancer of B cells) genes. In the study, 256 genes showed > 25% difference in expression: 87 up-regulated in high-lonely individuals, and 169 genes up-regulated in low-lonely individuals at baseline.

Bioinformatics analysis identified greater prevalence of NF- κ B genes in the set of genes up-regulated in the high-lonely individuals compared to genes up-regulated in low-lonely individuals.

After MSBR treatment, 143 genes showed > 25% difference in expression between conditions: 69 genes down-regulated in MBSR subjects relative to controls, and 74 genes relatively down-regulated in controls compared to MBSR subjects. Bioinformatics analysis indicated reduced activity of NF- κ B genes in MBSR-treated subjects relative to controls.

These changes were not accompanied by changes in behaviour, such as quality of sleep and exercise. One limitation could be that the MBSR classes are providing social support, which is reducing loneliness, although previous findings indicate that social support and social skills training per se were ineffective.

Yoga Overcomes Fatigue in Breast Cancer Survivors

A new study led by Dr Julienne Bower at the University of California, Los Angeles, in the United States involved breast cancer survivors with persistent cancer-related fatigue. The subjects were randomised to a 12-week Iyengar yoga intervention (n=16) or a 12-week health education control condition (n=15). Blood samples were collected at baseline, at post-intervention and at a three-month follow-up for genome-wide transcriptional profiling and bioinformatics analyses. Plasma inflammatory markers and salivary cortisol were also assessed.

The results showed that yoga intervention not only ameliorated fatigue but also reduced the inflammatory response. There was a clear down-regulation of pro-inflammatory genes in the yoga group. The two groups did not differ significantly at baseline and while the yoga group changed over time, the control group showed no significant changes.

A total of 435 gene transcripts showed >15% difference over time: 282 transcripts were up-regulated from baseline after intervention and at three-month follow-up in the yoga group relative to the controls, and 153 transcripts were relatively down-regulated. Particularly prominent among the yoga group's down-regulated genes were type I interferon responses.

Bioinformatic analysis showed reduced activity of NF- κ B, increased activity of glucocorticoid receptor and reduced activity of CREB (cyclic AMP response element-binding) protein, a transcription factor, all tending to reduce inflammatory response. In addition, there was a down-regulation of interferon-related transcription factor activity in the yoga group versus controls.

The levels of inflammatory markers at baseline were not different between the groups. One of the markers, sTNF-RII (soluble form of tumour necrosis factor-receptor II), showed a significant increase in the health education group, whereas the levels remained relatively stable in the yoga group. A similar pattern was found for IL-1RA (interleukin-1 receptor agonist). Yoga significantly increased glucocorticoid receptor (GR) activity. Previous research has documented a decrease in GR-mediated gene expression among breast cancer survivors with persistent fatigue, which may contribute to chronic inflammation. This suggests that yoga may cause glucocorticoid receptors to become more sensitive to the anti-inflammatory effects of cortisol, thereby decreasing inflammatory signalling. Yoga also reduced CREB activity, indicating a reduced sympathetic nervous system signalling through α -adrenergic receptors, which can activate NF- κ B genes and up-regulate transcription of pro-inflammatory cytokine genes. Thus, reduction in CREB also reduced inflammatory processes.

In addition, the down-regulation of genes involved in type I interferon (IFN) responses and reduction in IFN-related transcription factors may contribute to reduction in fatigue, as treatment with IFN- α is known to cause symptoms of fatigue in patients with melanoma and hepatitis C.

Meditation Overcomes Stress Among Family Dementia Caregivers

Family caregivers are highly stressed and are at risk of stress-related disease and general health decline.

One genome-wide transcriptional profiling study showed that monocytes from family caregivers exhibited heightened expression of genes with response elements for NF- κ B and reduced expression of genes with response elements for IRF (interferon regulatory factor) relative to healthy controls.

Forty-five family dementia caregivers were randomised to either Kirtan Kriya Meditation or relaxing music listening for 12 minutes daily for eight weeks, and 39 caregivers completed the study.

Genome-wide transcriptional profiles were collected from peripheral blood leukocytes sampled at baseline and at an eight-week follow-up. The results showed 68 genes differentially expressed: 19 up- and 49 down-regulated. Up-regulated genes included immunoglobulin-related transcripts. Down-regulated genes included pro-inflammatory cytokines and activation-related immediate early genes.

After intervention, both groups improved, showing significantly lower levels of depressive symptoms and better mental health, but the yogic group improvement was higher (43.3% improvement in meditation group compared

with 3.7% improvement in the relaxation group), suggesting amelioration of stress-induced cellular ageing. There were 23 subjects in the meditation group and 16 in the relaxation music group. The groups did not differ on any of the baseline characteristics except for BMI [body mass index], which was lower in the meditation group, but BMI was not associated with any of the outcome measures.

In a separate report on the same family caregivers, not only did the meditation group have significantly lower levels of depressive symptoms and greater improvements in mental health and cognitive functioning compared with the relaxation group, but the improvements were accompanied by an increase in telomerase activity. There were significant correlations between increased telomerase activity and decrease in depression and improvement in mental health score, the latter only in the meditation group.

The telomere is a region of repetitive DNA sequences at the end of a chromosome, which protect the chromosome from deterioration. Shortened telomere length and reduced telomerase, the enzyme responsible for telomere length and maintenance, are associated with premature death and predict a host of health risks and diseases that may be in part regulated by psychological stress.

A study published in 2011 showed that meditation and positive psychological change were associated with higher levels of telomerase activity.

This finding is now confirmed. On average, the incidence and prevalence of clinical depression in family dementia caregivers approached 50%, and they become less resilient to stress with advancing age and at risk of cardiovascular disease and death.

Rapid Epigenetic Changes from Meditation

A hint as to how quickly the activity of genes can be changed by meditation comes from a study on a day of intensive practice of mindfulness meditation in 19 experienced subjects.

The expression of circadian, chromatin modulatory and inflammatory genes was compared to that of a control group of 21 subjects with no meditation experience who engaged in leisure activities in the same environment.

Peripheral blood mononuclear cells were collected before and after the intervention, eight hours apart. Gene expression was analysed using customised quantitative real-time PCR assays. Both groups were also presented with the Trier Social Stress Test (TSST, a lab procedure for inducing stress).

Core clock gene expression at baseline was similar between groups, and their rhythmicity was not affected in meditators by the intensive day of practice.

All the epigenetic regulatory enzymes and inflammatory genes analysed were similar in basal expression levels in the two groups.

In contrast, after the brief practice there was reduced expression of histone deacetylase genes (HDAC 2, 3 and 9 which modify histone proteins, altering gene expression), changes in global modification of histones (H4ac; H3K4me3) and decreased expression of pro-inflammatory genes (RIPK2 and COX2) in meditators compared with controls.

The expression of RIPK2 and HDAC2 genes was associated with a faster cortisol recovery to the TSST in both groups.

The findings suggest that the regulation of HDAC and inflammatory pathways may represent some of the mechanisms underlying the therapeutic potential of mindfulness-based interventions.

About the Author:

Dr Mae-Wan Ho is the co-founder and director of the London-based Institute of Science in Society (ISIS), which promotes the public understanding of science as well as social responsibility and sustainability in science and also campaigns against the unethical uses of biotechnology.

She received her BSc in biology and chemistry (1st Class) in 1964 and her PhD in biochemistry in 1968, both from the University of Hong Kong. Her career spans more than 40 years in research and teaching in biochemistry, evolution, molecular genetics and biophysics.

Dr Ho is the holder of several patents and has received a variety of science-based awards, fellowships and grants. She is the author or co-author of over 200 scientific papers and has written, co-written or edited over a dozen books.

Her own titles include *The Rainbow and the Worm: The Physics of Organisms* (1993, 1998, 2008), *Genetic Engineering: Dream or Nightmare?: The Brave New World of Bad Science and Big Business* (1998, 1999; reviewed

in NEXUS 5/03) and Living with the Fluid Genome (2003). Her article "Psychic Cells Communicate Across A Physical Barrier" was published in the Science News section of NEXUS 21/05.

For more information, visit the ISIS website at <http://www.i-sis.org.uk>.

Editor's Note:

This is an edited version of Dr Mae-Wan Ho's ISIS Report of 21 May 2014, available at the ISIS web page <http://tinyurl.com/jvglwqp>. The complete article with references can be downloaded by ISIS members or on a one-off fee basis.

Sugar's Staggering Health Consequences

Consumption of soft drinks and processed foods full of refined sugar is at an all-time high. Numerous studies point to serious health problems, including heart disease, diabetes, obesity, behavioural issues and even cancer, caused by excessive sugar intake.

by Gary Null, PhD

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Posted on 3 February 2014 on the Global Research website

<http://www.globalresearch.ca>

Article available at

<http://tinyurl.com/kyeckta>

Killing Us Sweetly

In September 2013, a bombshell report from Credit Suisse's Research Institute brought into sharp focus the staggering health consequences of sugar on the health of Americans. The group revealed that approximately "30%-40% of healthcare expenditures in the USA go to help address issues that are closely tied to the excess consumption of sugar".¹ The figures suggest that the US national addiction to sugar runs up an incredible \$1 trillion in healthcare costs each year. The Credit Suisse report highlighted several health conditions including coronary heart diseases, type II diabetes and metabolic syndrome which numerous studies have linked to excessive sugar intake.²

Just a year earlier in 2012, a report by Sanjay Gupta, MD, on *60 Minutes* featured Robert Lustig, MD, an endocrinologist from California who gained national attention after a 2009 lecture he gave, titled "Sugar: The Bitter Truth", went viral. Dr Lustig has investigated the connection between sugar consumption and the poor health of the American people. He's had 12 articles published in peer-reviewed journals identifying sugar as a major factor in the epidemic of degenerative disease that now afflicts the United States. The data compiled by Lustig clearly shows how excessive sugar consumption plays a key role in the development of many types of cancer, obesity, type II diabetes, hypertension and heart disease. His research has led him to conclude that 75 per cent of all diseases in America today are brought on by the American lifestyle and are entirely preventable.³

Until the airing of this program, no one in the "official" world acknowledged that there's anything wrong with sugar —yet there's much research available if they choose to look [see references at <http://tinyurl.com/kyeckta>; Ed.].

With the rapid spread of information in today's Internet age, more and more health-conscious consumers and watchdog groups are calling attention to the many studies demonstrating sugar's harmful effects, but many of us in the natural health community have been alarming the public for decades. In point of fact, I have been writing about the hazards of sugar extensively in books and articles since 1971.

In 2002, my documentary *7 Steps to Perfect Health* premiered on Public Broadcasting Service (PBS) stations, including WETA in Washington, DC. As part of the PBS program, I poured sugar out of a bag which equalled the number of teaspoons that the average American teenager consumes in a given day. The quantity was verified by my general counsel, Mr David Slater, who had measured the number of teaspoons earlier in the day. If anything, my demonstration understated the true amount of sugar that we are consuming. The program was very well received and the program director informed me that it was so successful that it had set a record for non-prime-time programming and that he intended to replay it eight or nine times. However, the next day he informed me that he was sorry but he had bad news: not only would the program not be aired again, but I would not be invited back to present on the station. This was after I had presented five medically vetted, original PBS programs over the years, some of which had set station records. The program director explained that this was because the new information I presented on the dangers of sugar had run smack up against the president of the station's board, Sharon Rockefeller. I was told that Mrs Rockefeller had received a phone call from the sugar lobbying group representing soft drink makers and sugar consumers, and the decision was made to pull my program. I was informed that my statements regarding sugar's damaging health effects were deemed inaccurate. As it turned out, Mrs Rockefeller was sitting on the board of Pepsi-Cola at the time.

That was my first personal experience of dealing with the politics of sugar, which was also the politics of PBS. In response to this, I wrote letters to the sugar industry, the WETA station board and Sharon Rockefeller contesting their suppression of my program and their claim that sugar is unrelated to American health epidemics. This was 10 years ago. When we realise how many people since that time have developed diabetes, cardiovascular disease, cancer and many other illnesses after consuming these quantities of sugar, then should we not hold the major media, including Dr Gupta and *60 Minutes*, morally responsible for having so much scientifically verified information on the dangers of sugar consumption and yet choosing to accept the "official" statements from "official" medical

groups, government agencies, trade groups, spokespersons and scientists for hire, and in effect accepting industry-generated propaganda instead of seeking the truth? If we can find the truth with our limited resources, what possible excuse do Dr Gupta and other respected physicians with unlimited research capacity have? Why has it taken 40 years since I first wrote about the dangers of sugar for them finally to discover this truth? And how many tens of millions of children and adults have suffered with diabetes, obesity, heart disease and cancers during these years, all because of the arrogance, hubris and complicity of the medical establishment and media?

Financing Disease

A deeper look at the politics of the sugar industry reveals that huge sums are being doled out by government to prop up sugar companies. In a recent article in the *Wall Street Journal*, writer Alexandra Wexler explains that American taxpayers are currently responsible for shelling out \$280 million to cover the cost of loans from the US Department of Agriculture (USDA) which sugar producers are unable to pay back.⁴

Given the undeniable evidence demonstrating the toxicity of sugar and its enormous toll on the wellbeing of Americans, why is it that our health agencies and elected officials are not calling for a much-needed overhaul of existing policies which, in fact, offer generous support to the domestic sugar industry?

Where is the outrage over bailing out the purveyors of what is likely the most dangerous staple in the American diet? For our answers, we must follow the money trail.

In May 2013, members of the US Senate voted 54-44 against an amendment to the Farm Bill, introduced by Senator Jeanne Shaheen of New Hampshire, which would have significantly curtailed federal lending to sugar processors. In an insightful analysis of the vote, Alan Farago of CounterPunch.org points out that lawmakers opposing the measure were significantly more likely either to represent states in which sugar is grown or to count the sugar industry among their best campaign donors. Though the reform was voted down by senators on both sides of the aisle, Democrats were apparently even more beholden to sugar interests than their Republican counterparts. Farago writes:

"In the final tally, Democrats opposed sugar reform by 55 percent to 40 percent (NJ Senator Frank Lautenberg did not vote). U.S. senators from states identified as healthy' but with sugar constituencies—Minnesota (D), Vermont (D, I), Colorado (D), North Dakota (D, R) and Hawaii (D)—all voted *against* reform. The website Opensecrets.org points out that the second highest recipient of campaign cash from sugar interests was progressive champion, Al Franken (D-Minnesota). Franken in 2013 received \$27,999. 'Sugar is the only industry in the entire agribusiness sector that has consistently supported Democrats during the past two decades.'"⁵

The fact is that the authorities we look upon as "official" are often compromised by lobbyists inside the Beltway, while the mainstream media, in thrall to its advertisers, is still unwilling to report the whole truth about sugar. In order to raise public awareness about this critical issue, this article provides an in-depth examination of sugar as both a toxic food and a thoroughly corrupt extension of Big Business.

The Most Current Research

In his latest published study, Lustig and his colleagues unearthed a strong relationship between the incidence of diabetes and sugar availability in populations around the world.

Published in the online journal PLOS ONE in February 2013, the study showed that those places in which sugar was more available had a greater incidence of type II diabetes.⁶

Examining data from 175 countries over the last 10 years, the authors investigated whether the availability of other food groups including oils, meats, cereals and fibres as well as socioeconomic factors such as income, urbanisation and ageing were related to diabetes prevalence, but they only found statistically significant evidence of a sugar-diabetes link. In a piece for the *New York Times*, columnist Mark Bittman offered his perspective on Lustig's latest research:

"This is as good (or bad) as it gets, the closest thing to causation and a smoking gun that we will see. (To prove scientific' causality you'd have to completely control the diets of thousands of people for decades. It's as technically impossible as 'proving' climate change or football-related head injuries or, for that matter, tobacco-caused cancers.) And just as tobacco companies fought, ignored, lied and obfuscated in the '60s (and, indeed, through the '90s), the pushers of sugar will do the same now."⁷

In an article published in February 2012 in the journal *Nature*, Lustig and his co-authors state the following:

"Regulating sugar will not be easy... We recognize that societal intervention to reduce the supply and demand for sugar faces an uphill political battle against a powerful sugar lobby, and will require active engagement from all stakeholders. Still, the food industry knows that it has a problem. With enough clamour for change, tectonic shifts in policy become possible. Take, for instance, bans on smoking in public places and the use of designated drivers, not to mention airbags in cars and condom dispensers in public bathrooms. These simple measures—which have all

been on the battleground of American politics—are now taken for granted as essential tools for our public health and well-being. It's time to turn our attention to sugar."⁸

The connection between America's epidemic of chronic diseases and sugar grows clearer each day. A recent study by nutritional biologist Kimber Stanhope, PhD, of the University of California, Davis, associated higher intake of high-fructose corn syrup with higher levels of LDL (bad) cholesterol as well as an increased risk of cardiovascular disease. In the study, test subjects were required to replace 25 per cent of their caloric intake with sugary drinks. The study offered further proof that all calories are not created equally and that those coming from sugar are artery clogging and actually promote weight gain.⁹

Stanhope's findings corroborate the results of another study, published in March 2012 in the American Heart Association's journal *Circulation*. The study found that men who drank one 12-ounce [~355 mL] beverage sweetened with sugar a day were 20 per cent more likely to develop cardiovascular disease than men who did not consume any sugary drinks.¹⁰

Another study, which recently appeared in the *Journal of the American Society of Nephrology*, linked the intake of excess quantities of fructose with cardiovascular illness, diabetes, chronic kidney disease and metabolic syndrome.¹¹

The damaging effects of sugar on cognitive health have been the subject of several recent studies. In September 2012, scientists at the David Geffen School of Medicine at the University of California, Los Angeles, uncovered that rats that were fed a diet high in fructose performed poorly in tests using mazes which were designed to assess memory and learning when compared to the control group.¹²

In a 2012 article entitled "Food for thought: Eat your way to dementia", researchers at Brown University discussed their findings that a diet high in sugary foods disrupts insulin levels and may trigger the build-up of toxic amyloid proteins—the proteins directly implicated in the progression of dementia—in the brain.¹³

These conclusions are reinforced by the results of a Mayo Clinic study released in October 2012 which showed that seniors who consumed a diet high in sugars and carbohydrates had a significantly greater risk of developing mild cognitive impairment and dementia when compared to seniors whose diet contained more fat and protein.

Sugar's Harm to Your Body

When we think of sugar, we often only think about the refined white sugar bought in paper packages or cubed for tea. If we're worried about too much sugar, maybe we'll check the nutritional information on the backs of processed sweets before we make a purchase. But really, sugar is often underestimated because of its incredible predominance in a lot of what we eat every day.

The American Heart Association (AHA) and the USDA share this broader definition of sugar and the amount of sugar we consume each day. In an AHA Statement to Healthcare Professionals, the group provided a broad definition of what constitutes "sugar":

"There are many, sometimes confusing, terms used in the literature. *Simple carbohydrate* (sugar) refers to mono- and disaccharides; *complex carbohydrate* refers to polysaccharides such as starch. Common disaccharides are sucrose (glucose+fructose), found in sugar cane, sugar beets, honey, and corn syrup; lactose (glucose+galactose), found in milk products; and maltose (glucose+glucose), from malt. The most common naturally occurring monosaccharide is fructose (found in fruits and vegetables). The term *dextrose* is used to refer to glucose. *Intrinsic* or *naturally occurring* sugar refers to the sugar that is an integral constituent of whole fruit, vegetable, and milk products; *extrinsic* or *added* sugar refers to sucrose or other refined sugars in soft drinks and incorporated into food, fruit drinks, and other beverages."¹⁴

The latest statistics tell us that the average American consumes 130 pounds [~59 kilograms] of sugar each year—or more than one-third of a pound [~0.15 kilograms] every day.¹⁵

The average amount of sugar consumed by Americans today is shockingly excessive. As we shall see, this sugar excess contributes to the modern epidemics of obesity, diabetes, heart disease and even cancer.

Sugar and Your Health

Refined sugar only really became a major part of the human diet over the last few hundred years. As reported by the authors of *Sugar Busters!*, refined sugar has only been around during "a mere blink of time in man's digestive evolution".¹⁶

It is quite logical that we should have added refined sugar to the priority list of things that are, or may be, "hazardous to your health" when you see the increase in disease caused by our huge consumption of refined sugar and certain other carbohydrates. Sugar just may be the number-one culprit in lowering the quality of life and in causing premature death. There is certainly enough evidence to bring us to that conclusion.

Historical Deception

As far back as 1942, the American Medical Association (AMA) stated that it would be in the interest of public health to limit the consumption of sugar in any form when it is not combined with significant proportions of foods high in nutritious quality. Lately, however, the AMA and other medical organisations have been largely silent about sugar consumption.

A recent Gallup poll indicates that nearly half of all Americans consume soft drinks on a daily basis and that those who do drink soda average about 2.6 glasses per day.¹⁷ Despite these and many other health risks, the soft drink industry consistently portrays its products as being positively healthful. In 1997, Coca-Cola spent \$277 million on advertising targeted towards children. The advertising placed their logos and products within easy reach of children, and Pepsi, DrPepper and 7 Up have licensed their logos to the baby-bottle manufacturer Munchkin Bottling, Inc.¹⁸

In 1998, Ron Lord wrote in a paper for the Agricultural Outlook Forum that sugar once had "a rather negative public image".¹⁹ Families generally viewed excessive sugar as a health risk and avoided processed sweets. "Then in the 1980s," Lord continued, "public attention became focused on fat as something to avoid; and about the same time a rather successful advertising campaign to promote the healthy and natural aspects of sugar was conducted."²⁰ This resulted in an intense increase in carbohydrate—and especially sugar—consumption. As more sugar found its way into foods not even thought to be sweet, such as fast food and processed goods, this sugar intake has simply ramped up.

Our society is now experiencing the results of the sugar industry's successful advertising campaign to promote the "healthy and natural aspects of sugar". But let's take a look at the negative aspects together. As you'll see, a diet based on natural foods like vegetables, grains and legumes is a healthy alternative to this troubling explosion in sugar dependency.

Sugar and Addiction

People often say they have a "sweet tooth". You may have a friend who excitedly rushes off for a "sugar fix". But the links between sugar and addiction are actually well documented in a number of studies.

C. Colantuoni, an obesity researcher, showed that excessive sugar intake causes serious dependence and that the removal of sugar creates withdrawal symptoms. He and his colleagues showed that withdrawal from sugar is qualitatively similar to withdrawal from morphine or nicotine.²¹

Similar findings concerning sugar addiction have been published by numerous researchers. Using MRI scanners measuring the brain's reaction to sugar, scientists at the Oregon Research Institute established that sugar has a very similar effect on the brain as highly addictive drugs such as cocaine.²²

Sugar and Ageing

Of particular concern to those reaching the andropause and menopause stages of life, sugar's effect on ageing should be considered alongside its health risks. Anti-ageing research has begun to show that sugar is one of the most powerful ageing substances known. One of the most integral negative ageing effects to consider is the bonding between glucose and collagen, called glycation, which can result in many negative effects including thickened arteries, stiff joints, pain, feeble muscles and failing organs.

According to researcher Lisa Melton, PhD, diabetics age prematurely because the sugar-driven damage of glycation cannot be stopped. Diabetics suffer a very high incidence of nerve, artery and kidney damage because high blood-sugar levels in their bodies markedly accelerate the chemical reactions that form advanced glycation products. According to Melton, "after years of bread, noodles and cakes, human tissues inevitably become rigid and yellow with pigmented AGE [advanced glycation end products] deposits".²³

Sugar and Appetite Suppression

Researchers have also shown that a lifetime of sugar intake can actually lower your intake of necessary nutrients by suppressing your appetite. Anderson *et al.* reasoned that a primary mechanism by which carbohydrates are thought to regulate satiety and food intake is through their effect on blood glucose. They found that food intake and subjective appetite are inversely associated with blood glucose response in the 60 minutes following consumption of carbohydrates. That's why candy bars are recommended by advertisers to hold you over until you eat a meal. Your body may not be getting any of the nutrients it needs, but it is being tricked into thinking it has ingested the proper amount of energy.²⁴

Anderson's study concluded that sugary foods cause appetite suppression and prevent people from achieving a balanced diet with proper nutrients unavailable in sugary products.²⁵ In other words, sugary snacks have the potential of leading to malnutrition.

Sugar and Cancer

In the 1930s, Otto Warburg, MD, PhD, a Nobel laureate in medicine, discovered that cancer cells have a fundamentally different energy metabolism compared to healthy cells. He found that increased sugar intake could increase cancer cell production. The more primitive nature of cancer cells requires a direct supply of glucose, not being able to master the more complex synthesis of glucose from larger molecules. The build-up of lactic acid and an acidic pH from direct consumption of glucose in cancer cells is a diagnostic factor for cancer.²⁶ This means that there is a direct relationship between sugar ingestion and the risk of cancer.

An epidemiological study in 21 modern countries (in Europe, North America, Japan and others) revealed that sugar intake is a strong risk factor that contributes to higher breast cancer rates, particularly in older women.²⁷

A four-year study by the Netherlands National Institute of Public Health and the Environment compared 111 biliary tract cancer patients with 480 controls. The study concluded that cancer risk associated with the intake of sugars had more than doubled for the cancer patients.²⁸

These findings are mirrored in the research of D. S. Michaud *et al.*, at the US National Cancer Institute, who followed up two large studies conducted over the past 20 years on approximately 50,000 men and 120,000 women. They concluded that obesity significantly increased the risk of pancreatic cancer and that physical activity appears to decrease the risk of pancreatic cancer, especially among those who are overweight. Preventing obesity by dietary intervention and exercise is by far the best way to avoid pancreatic cancer.²⁹

But the Michaud team continued their investigation of the triggers of pancreatic cancer and found that evidence from both animal and human studies suggested that abnormal glucose metabolism plays an important role in pancreatic carcinogenesis. They investigated whether diets high in sugar were to blame. They found that a diet high in sugar may increase the risk of pancreatic cancer in women who already have an underlying degree of insulin resistance.³⁰

Cardiovascular Disease

On 23 July 2002, the American Heart Association released a report on "Sugar and Cardiovascular Disease". The report concluded that scientific data indicates that sugar consumption is detrimental to human health, that no data indicates that sugar consumption is advantageous, and that high sugar intake should be avoided. The report also stated that obesity is a definite cause of cardiovascular disease and death.³¹

A study from the State University of New York at Buffalo, published in August 2000, reported that excess sugar in the blood increases the production of free radicals, which have been linked to ageing and heart disease.

Healthy adults who were given a drink containing 75 grams of pure glucose, the equivalent of two cans of cola, experienced a significant rise of free radicals in the blood one hour after the drink and a doubling of free radicals after two hours. The sugar drink also produced an increase in a part of an enzyme that promotes free radical generation and a four per cent decrease in levels of vitamin E. Paresch Dandona, MD, PhD, concluded: "We believe that in obese people, this cumulatively leads to damage and may cause hardening of the arteries."³²

Numerous other studies have repeatedly documented the relationship between high blood-sugar levels and increased heart disease.³³

In a 2001 UN report commissioned by the World Health Organization and the Food and Agriculture Organization, a team of global experts identified the excessive consumption of sugar from snacks, processed foods and drinks as one of a few major factors causing worldwide increases in cardiovascular diseases, cancer, diabetes and obesity.

In 2001, such chronic diseases contributed approximately 59 per cent of the 59.6 million total reported deaths in the world and 46 per cent of the global burden of disease.³⁴

Sugar and Children's Behaviour

Parents often joke about their children being on a sugar high, especially when those children act up or seem to be out of control. But several important studies have actually confirmed the relationship between sugar consumption and behavioural changes in children. Between 1973 and 1977, William Crook, MD, showed that a majority of children could have their behaviour affected by the removal of particular foods.³⁵ This was one of the first studies to confirm a link between diet and behaviour, but was only a stepping stone to what came later.

Stephen Schoenthaler, PhD, conducted dietary research on children for almost 30 years. His original, seminal studies eliminated sugar and junk foods from the lunch programs of one million school children in over 800 New York schools during a seven-year period (1976-1983). Learning performance was established first, and then, in 1979, dietary changes were introduced. High-sucrose foods were gradually eliminated or reduced and there was a gradual elimination of synthetic colours and flavours and selected preservatives (BHA and BHT). There was a 15.7 per cent gain (from 39.2 per cent to 55.0 per cent) in learning ability compared with other schools during the years in which these changes in diet were introduced. Schoenthaler also noted that out of 124,000 children who once had been unable to learn grammar and mathematics, 75,000 were able to perform these basic tasks after dietary

changes alone.³⁶ In other words, removing sugary foods made children smarter!

Much of this change in learning ability, however, had to do with changed behaviour in the classroom during their studies as a result of removing the excess sugar in their diet. It should be noted that today, sugar intake in children and teens is much higher than it once was. A corresponding spike in behavioural problems and dropout rates should trouble concerned parents who see that diet is important to their children's future.

Schoenthaler continued his work by studying thousands of juvenile delinquents on junk-food-free diets. The removal of these sugary foods always resulted in the same end product: an observed dramatic improvement in mood and behaviour.³⁷

With regard to sugar intake in particular, Schoenthaler worked with the Los Angeles Probation Department Diet-Behavior Program and observed 1,382 incarcerated delinquents at three juvenile detention halls. When trying a low-sucrose diet, these young delinquents showed an average 44 per cent drop in antisocial behaviour. The greatest reductions, however, were seen in particular groups: repeat offenders (86 per cent drop in antisocial behaviour), narcotics offenders (72 per cent), rape offenders (62 per cent), burglars (59 per cent), murderers (47 per cent) and assault offenders (43 per cent).³⁸

The second part of his study followed 289 juvenile delinquents at three juvenile rehabilitation camps. They exhibited a 54 per cent reduction in antisocial behaviour after sugar consumption was reduced.

A similar Alabama Diet-Behavior study by Schoenthaler observed 488 incarcerated delinquents for 22 months. The decline in antisocial behaviour resulting from reduction in sugar consumption ranged from a low of 17 per cent to a high of 53 per cent (an average of 45 per cent) depending upon gender, race and type of offender.³⁹ Schoenthaler's work with juvenile delinquents and sugar intake offers up pretty unflattering evidence of the effect that a sugary diet has on children's behaviour. As we often think about the effects of drug abuse on teen delinquency, it may be time that we begin to consider what our kids are snacking on as well.

The sugar industry usually cites four very-small-scale studies to deny any link between consumption of sugar by children and hyperactivity.⁴⁰ Although there were many flaws in those studies, the conclusions are used to suppress any objections to the increasing amount of sugar in children's diets. Problems with these studies included a number of issues that weaken their claims.

For instance, the amount of sugar used was too small to warrant a reaction, the size of the trial was very small, the observation times were short, the control group was denied a nutritious alternative to sugar, and artificial sweeteners—which had their own unmeasured effects—were used as the placebo controls.

One of the sugar industry's favourite studies used an average of only 65 grams (13 teaspoons) of sugar daily for a trial group of 21 persons.⁴¹ This is the average amount of sugar in a single 10-ounce [~296-mL] can of soft drink. A milkshake alone has 30 teaspoons of sugar, and a sugar-loaded birthday party can net a child as much as 100 teaspoons of sugar within several hours.

If the overall effect of too much sugar on children were to be measured, you would think that a researcher would start at a higher rate. Some researchers have calculated that a growing pre-teen may consume on average as much as 50 teaspoons of sugar a day, far more than the meagre 13 teaspoons used in the study. A clinical study based on giving children only 13 teaspoons of sugar, or about 25 per cent of their normal daily consumption of sugar, should not have produced any appreciable results. Once the study was finished, it hadn't. Yet, by giving the children less sugar than they usually absorb in a day, this study concluded that the mothers of these children were wrong in saying their children were hyperactive as a result of the sugar they consumed.

Further, in the four central studies most often quoted by sugar promoters, the trial sizes were quite small, with only 10 to 30 children who were followed only for a period of a few hours. In contrast, in one of Schoenthaler's studies, 800,000 schoolchildren were studied over a greater length of time. In six of his other studies, 5,000 juvenile delinquents were studied.^{42, 43} Schauss, in two studies, examined over 2,000 juvenile delinquents.⁴³

As anyone who has followed political polling or any other type of statistics knows, you get closer to the facts when you survey the greatest number.

It is important to note that the more trustable studies performed by both Schoenthaler and Schauss showed how diets high in sugar can lead to juvenile delinquency and behavioural problems in children.

Their studies were also conducted over a period of several years, not just a few hours as was the case with some of the "pro-sugar" studies. For instance, Behar's pro-sugar study gave 21 males their 13-teaspoon sugar drink and observed them for only five hours on three mornings. Wolraich observed his 32 hyperactive school-age boys for only three hours before concluding that consumption of sugar has no effect on human behaviour.⁴⁴

Other criticisms of the pro-sugar studies include that there were usually no controls on the children's normal diets. Thus, the studies were performed with children who were told not to eat any breakfast in the morning. They would

then go to school where they would be given a sugared drink and then be tested for changes in behaviour. Yet, for these children, the drink was equivalent to their missing breakfast, and would therefore not necessarily cause any changes in behaviour.

As we can see, there is a general consensus among studies championed by the sugar industry: children's behaviour is unaffected by sugar.

But there is an opposite consensus among researchers unassociated with the sugar industry and its lobby. That consensus holds that sugar does have an effect on children, causing behavioural problems that range from hyperactivity to delinquency.

The best choice is a diet that removes unnecessary sugar and processed foods, one which has no negative effect on children's behaviour and creates a positive effect of lifetime health.

Conclusion

Excess sugar ingestion is rampant in today's society. We are eating sugar in foods that don't even warrant sweeteners. Sugary drinks and candies thrive in the business world, but this excess sugar has saddled us with alarming health risks like obesity and diabetes.

The sugar industry, with its carelessness for workers and the environment, cannot be trusted to tell us the facts about the health of their products. But that doesn't stop them from pushing to assure us that constant sugar ingestion is just a part of life.

The truth is, all this sugar doesn't have to be a part of our everyday life. We can dump sugary products and take up a diet focused on nutrient-rich natural foods.

Diets centred on vegetables, legumes and whole grains provide everything a body needs for optimal health, and help to suppress the addictive desire for sweets.

The best choice for those moving into the andropause and menopause stage of life is to drop sugar and pick up healthy alternatives to ensure a long and happy life.

About the Author:

Gary Null, PhD, has been at the forefront of alternative medicine and natural healing for nearly four decades. A multi-award-winning journalist, Dr Null has written over 70 books and directed over 100 documentaries on natural health. His syndicated radio show has been on the air for 38 years. Dr Null has also developed a range of premium health products. Visit his website <http://www.garynull.com>.

Editor's Note:

This is an edited extract from Dr Gary Null's article "Sugar: Killing Us Softly". To see the complete version with references and endnotes, go to the GlobalResearch.ca web page <http://tinyurl.com/kyeckta>.

Directed-Energy Weapons For Political Control

While the military-industrial complex has been creating ever more despicable ways to control us through the electromagnetic environment, we have bought into this nightmare with our increasing reliance on personal communications technology to the detriment of our health and freedom.

by Elana Freeland
© 2011-14
Email: stargirth@gmail.com

This edited article was originally composed as a talk for the Carnicom Institute Webinar of Thursday 31 March 2011.

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This Covert Electromagnetic Era

Like nuclear radiation, the electromagnetic radiation (EMR) technology in which we've become so enmeshed will require a painful learning curve. We're engaged in a giant worldwide experiment in which electropollution, biological stress, mental health and even judicial systems demand serious rethinking. It might be comforting to believe that ignorance of the impact on human health here and now and in future generations lies behind the present proliferation of cell towers and Wi-Fi technology, but the truth is that the dangers inherent in non-ionising, nonthermal electromagnetic technology have been well known at least to military-funded scientists since Project *Pandora* in the mid-1960s.

There's No Doubt We're Being Pulsed By Our Environment

In the early era of radar, radar operators' symptoms of sterility, baldness, cataracts behind the lenses, white blood cell proliferation and chromosome changes pointed the way, as did their children with Down's syndrome. The military's response was to create yet more secret classifications and to make sure that thermal power density norms ignored nonthermal effects. The Cold War and EM open-field research was to be protected at all costs, biological health be damned.

In the mid-1990s, the American National Standards Institute adopted the safety levels of the Institute of Electrical and Electronics Engineers (IEEE): for frequency, 300 kHz to 100 GHz, with everything in North America, Western Europe and Japan set for 50-60 Hz fields; for power, the 10-100 milliwatts per square centimetre (mW/cm²) standard was a far cry from that of Soviet Russia. Indeed, if the Soviets' limit of 1.0 microwatt to 10 microwatts in the workplace were adopted in the USA, 90 per cent of FM radio stations would have to be shut down. For specific absorption rate (SAR) standards for cellphones and towers, the Federal Communications Commission relied on the IEEE again, as well as on the National Council on Radiation Protection & Measurements, and then garnered legitimacy from the Food and Drug Administration, the Environmental Protection Agency and the Occupational Safety & Health Administration, *none of which backed the standard with scientific research*, choosing instead to believe the IEEE story that the effects of nonthermal EMR are not dangerous, despite repeated evidence of biological effects following from nonthermal power densities of 1,000 to 10,000 microwatts.

So it should not be surprising that *none of these standards is law*. The military-industrial complex continues to use the frequencies and power that it pleases, from everything running on a battery to electric trains, refinement plants, antitheft systems, metal detectors, air and sea navigation, military communication, 500,000 miles of high-voltage power lines and their switching stations operating as gigantic antennae in the extremely low frequency (ELF) band at 60 Hz, and on and on.

ELF fields bombard us everywhere, with the human body's resonant frequency acting as an antenna or a tower. In fact, ambient ELF systems overlap frequencies and *pulse* our bodies, interfering with our biocycle timing and thus undermining our immune systems.

Peak resonant frequency lies in the middle of the very high frequency (VHF) band (30-300 MHz) and includes FM radio, television, land mobile stations, long-range communication with radio modems, ham radio, marine communications, air traffic control, etc.

Superconducting cables increase the field strength around power lines by 20 times, and somehow it's fine that microwave ovens leak up to 5,000 microwatts and that the cumulative density of radio waves around us is more than 200 million times the natural level from the Sun, including the solar magnetic storms that affect the Schumann frequency²—a fact reflected in the high level of psychiatric hospital admissions during solar storms.

Our Immune Systems Are Under Assault

Despite corporate media disinformation, those of us who have been paying attention know that extremely low frequencies have a primary impact on all life forms and that lower power densities can do more damage than higher densities, particularly when it comes to radiofrequency (RF) or microwave absorption. In his 1985 book *The Body Electric: Electromagnetism and the Foundation of Life*, Robert O. Becker, MD, stressed that we should be most concerned about extremely low frequencies:

"...The major problems come from extremely low frequencies, but higher frequencies have the same effects if pulsed or modulated in the ELF range. This is very often the case, for, to transmit information, microwaves or radio waves must be shaped. This is done by interrupting the beam to form pulses or by modulating the frequency or amplitude (size) of the waves. Furthermore, today's environment is a latticework of crisscrossing signals in which there's always the possibility of synergistic effects or the 'construction' of new ELF signals from the patterns of interference between two higher frequencies. Therefore, experiments in which cells or organisms are exposed to a single unmodulated frequency, though sometimes useful, are irrelevant outside the lab. They're most often done by researchers whose only goal is to be able to say, 'See, there's no cause for alarm.'¹³

Many experiments have confirmed stress reactions to ELF magnetic and electrical fields and microwave exposures, stress being the precursor to a disease condition that calls upon the immune system to work its healing magic. However, if stress never lets up, the immune system is under attack 24/7. Dr Becker noted:

"...In his pioneering lifework on stress, Dr Hans Selye has clearly drawn the invariable pattern. Initially, the stress activates the hormonal and/or immune systems to a higher-than-normal level, enabling the animal to escape danger or combat disease. If the stress continues, hormone levels and immune reactivity gradually decline to normal. If you stop your experiment at this point, you're apparently justified in saying, 'The animal has adapted; the stress is doing it no harm.' Nevertheless, if the stressful condition persists, hormone and immune levels decline further, well below normal. In medical terms, stress decompensation has set in, and the animal is now more susceptible to other stressors, including malignant growth and infectious diseases.'¹⁴

In 10 to 30 years, stress reactions of human beings living under high-voltage wires and over underground power lines have causally led to cancer or other internal diseases, including deep depression and suicide. The adrenal cortex becomes exhausted, the endocrine system erratic. In offices with their computers, lighting, telephones and fax machines, the EM field forces the neurotransmitter acetylcholine to emit subliminal distress signals. Blood pressure and brain wave patterns change, and blood triglyceride levels go up—harbingers of stroke, heart attack and arteriosclerosis. Stress response, desynchronised biocycles, interference with cellular metabolism and growth process—the list goes on, culminating in genetic alteration of future generations.

Enter the Military Battlespace Now Everywhere

Besides the crossfire of radiation from FM radio and television stations and cellphones bouncing from tower to tower, there are military applications as well. Consumers have convenience and careers on their mind, while the military-industrial complex is investing in weapons and control—what it calls "C4" (Command, Control, Communications, Computers). If you haven't noticed this military presence, Dr Becker explained why: "Because industry and the military demand unrestricted use of electromagnetic fields and radiation, their intrinsic hazards are often compounded by secrecy and deceit."¹⁵

In my years of piecing together the "national security"¹ non sequiturs surrounding EM technology, the lacunae and disinformation landmines, I have found secrecy and deceit to be true in spades. Add to this what electrical engineer Keith Harmon Snow avers: "Microwave technologies and electromagnetic energy are used by the military as integral components of weapons systems precisely because they are detrimental to life."¹⁶

The events of 11 September 2001 (9/11) marked a dramatic turning point in many ways, one being the increased use of electromagnetic weapons for public shock and awe—from electronic surveillance technology like radiating devices and receivers, non-radiating devices and laser-facilitated listening devices, both ground and satellite, to "hot on the hook" phones, "smart phones" and Exaudio software to detect and decode emotions, etc. The 1998 film *Enemy of the State*, starring Will Smith and Gene Hackman, offered an infotainment preview of how "eye in the sky" satellites like the IRIS track us with infrared and visuals. Remotely controlled open-source data surveillance technology like microcomputers, pattern recognition, voice- and thought-activation, including brain-wave monitoring of thoughts, is now big business (thus the term *military-industrial complex*).

In this unseen electromagnetic era, the line between military and civilian is rapidly disappearing as the military redefines all of life as a "battlespace".⁷ *Antipersonnel* weapons euphemistically known as "non-lethal" weapons include sonic, phaser (photon amplification by stimulated emission of radiation), psychotronic scalar wave and infrared weapons—any of which might be wheeled into any neighbourhood or peaceful political demonstration of any nation that has signed status of forces agreements.

Take, for example, the high-power microwave (HPM) projectile known as the Active Denial System (ADS) that pulses electromagnetic radiation at 95 GHz, boils molecules in and under the skin and melts body organs, or the Long Range Acoustic Device (LRAD), an absolutely silent sonic weapon ("directed sound communications system") that launches a thermo-elastic wave of acoustic pressure at high frequency (2.5 kHz) in a 30-degree beam which

silently screams into the inner ear by *bone conduction*. A turn of the LRAD dial can cook eyeballs and organs, and permanent auditory damage occurs at 15 metres. This "non-lethal" device is usually mounted on a Hummer and is primarily used for crowd control.⁸ So much for First Amendment freedom of assembly.

An *anti-materiel* electromagnetic pulse (EMP) is the burst of EM radiation resulting from a nuclear detonation and/or a suddenly fluctuating magnetic field. Rapidly changing electric or magnetic fields then couple with electronic systems and produce damaging current and voltage surges. A detonation a few thousand miles above the Earth can *destroy*, not just paralyse, electronics across the continent.

The "Non-Lethals" You Don't Hear About

Then there are the EM weapons that are even less public because they are being used covertly for political control in a *quiet* war against populations, dissidents and individuals displeasing to various powers that be. Examples include laser systems (free electron, X-ray, neutral particle beam, chemical-oxygen-iodine, mid-infrared advanced chemical laser, etc.) delivering blurred vision and holograms; ion-beam plasma augmented-reality mind control delivered by satellites that first track targets via their bioenergetic signatures and then couple plasma with their EM fields; and, of course, nonaural carriers that directly induce silent subliminal messages into the brain, often known as *voice-to-skull* (V2K) or *synthetic telepathy*. In line with Cold War secrecy and deceit, thousands of nonconsensual human subjects have been used for target practice of weaponised electromagnetics.

Let's begin with the US Bicentennial of 4 July 1976 when a Soviet ultra low frequency (ULF) radio signal known as the Woodpecker was finally detected. From an enormous Tesla magnifying transmitter in Kiev, a pulse at a median of 10 Hz was being sent to somewhere between Corvallis and Eugene, Oregon. (Pulse-modulated microwaves are efficient carriers of mind-control signals in that they can pass through a skull that is otherwise resistant to low-level non-pulsed electromagnetic radiation, as in ELFs.) It is thus more than coincidental that between 1970 and 1975, the suicide rate in Medford, Oregon, rose far above the national average.

What is less known is that the nearby US military base had been "streaming" the Soviet Woodpecker signal into Medford for years. What this reveals is that these two titans colluded in EM experiments of nuclear magnetic resonance, induction of cancers, interference with mental processes, etc. throughout the Cold War. In fact, the Soviet Woodpecker had been zapping the US embassy in Moscow since the 1950s with the tacit consent of American intelligence under Project *Pandora*. By 1978, the CIA's Operation *Pique*—precursor to the High-frequency Active Auroral Research Program, or HAARP—would be bouncing radio signals off the ionosphere and measuring the various effects on specific populations.

On 17 August 1975, Senator Frank Church, heading up the US Senate Select Committee to Study Governmental Operations with Respect to Intelligence Activities, went on NBC's *Meet the Press* and said the following:

"I know the capacity that is there to make tyranny total in America, and we must see to it that this agency [the National Security Agency] and all agencies that possess this technology operate within the law and under proper supervision so that we never cross over that abyss...from which there is no return."

That same year, the Soviets proposed a ban on EM weapons to the United Nations General Assembly. Later, at the 1978 SALT (Strategic Arms Limitation Talks) treaty negotiations, Soviet General Secretary Leonid Brezhnev described these weapons as "more frightful than the mind of man has ever conceived". He was looking towards a future of electron "amnesia" beams and magnetospheric guns that make you "see stars"; handheld VLF (20-35 kHz) infrasound generators that trigger nausea, diarrhoea and abdominal pain; Brilliant Eyes surveillance satellites equipped with multispectral scanners, interferometers, visible infrared spin-scan radiometers, cryocoolers, hydride sorption beds, brain maps and neurophones; electronic imaging satellite beams that lock onto human targets in real time and assault them with lasers.

From MK-ULTRA to EMK-ULTRA

Cold War MK-ULTRA programs were always seamlessly morphing into remote electromagnetic mind-control programs. Back in the 1950s (MK-ULTRA *formally* got going in 1953), CIA-funded W. Ross Adey, MD, at the Brain Research Institute of the University of California, Los Angeles, was studying pulsed frequencies for *confusion beam weaponry*. By interfering with the brain's calcium flow, concentration, sleep and brain functions could be disrupted. Author Evelyn Waugh may have been the target of such a technology (see his 1957 novel *The Ordeal of Gilbert Pinfold*).

The Russian chess champion Boris Spassky claimed that he'd lost the 1972 world championship to Bobby Fischer due to being bombarded with confusion rays.

Then there was the LIDA, a Soviet brain-entrainment machine that emitted waves at 10 Hz, followed in 1958 by the Neurophone, which was invented by Patrick Flanagan, PhD, as a 13-year-old in Bellaire, Texas. The Neurophone could deliver aural harassment via microwaves or lasers by first converting sound to electrical impulses that would then be transmitted on radio waves to the skin and convince the brain that it had "heard" a sound. The Neurophone, like all mind-control discoveries, was quickly given a "national security" classification.

In 1961, neuroscientist Allan Frey sliced microwave carriers, inserted audio modulation and remotely sent *microwave hearing* to the auditory cortex of targets. It was found that pulsing microwave beams increased the permeability of the blood-brain barrier, which in turn enhanced the effects of drugs, bacteria and poisons. (Yes, disease and drug frequencies can be transmitted via modulated or pulsed electromagnetic energy.) Frey could speed up, slow down or stop hearts by synchronising heartbeat to a pulsed microwave beam.

In 1969, Yale professor Jose M. R. Delgado, a Spanish advocate of "psychocivilised" society, perfected remote electrical stimulation of the brain (ESB) to control behaviours, actions, instincts and emotions from a distance.

Today, focused EMR beams can manage the brain like an electrical toy. Targets can tell when they're being zapped by low-power microwaves (microwatts/cm²) pulsed at 300-3,000 MHz because the beam will boom, hiss, click or buzz just behind the head.

In the 1970s and 1980s, Russian scientist Igor Smirnov, the father of "psychocorrection" (an ice-cold term that he coined to denote the use of subliminal messages to alter the will or modify the personality without the subject's knowledge), utilised electroencephalographs (EEGs) to measure brain waves. From the EEG, Smirnov could create a computerised map of the individual's subconscious, including impulses such as anger and sex drive. (The mapping of primary frequency allocation and distribution of biotelemetrically responsive frequencies is known in the intel business as *prima freaking*.) With taped subliminal messages, Smirnov could alter the mental landscape.

In 1973, Joseph C. Sharp, PhD, of the Walter Reed Army Institute of Research, modelled the pulsed-microwave audiogram, an analog of word sound vibrations, on Dr Flanagan's Neurophone and beamed words into the brain. Synthetic telepathy connects subvocalised signals in the brain to a computer via a maser (microwave amplification by stimulated emission of radiation) beam.

Software then associates specific brain-exciting potentials with particular words and "reads" subvocalised 15-Hz, 5-mW thoughts from the auditory cortex.

It's the *closed-circuit television of the mind*. By using ELF audiograms carried by a single pulse-modulated maser, subvocalised thoughts of synthetic telepathy operators can be beamed into the target's brain for "forced conversation".

As Dr Becker wrote: "Such a device has obvious applications in covert operations designed to drive a target crazy with voices' or deliver undetectable instructions to a programmed assassin."⁹

Brain-wave monitors eventually graduated from EEGs to magnetoencephalographs (MEGs) that correlate brainwave patterns via a remote crystalline computer whose software reads and translates spoken words and silent thoughts.

MEG scanners have the speed and resolution to make brain-machine interface possible, and room-temperature superconductors have made MEGs portable—perfect for in-the-field experimentation or harassment.

In 2003, the Defense Advanced Research Projects Agency launched the Brain-Machine Interfaces program to create "new technologies for augmenting human performance through the ability to non-invasively access these codes in the brain in real time and integrate them into peripheral device or systems operations".¹⁰ Today, US Special Forces soldiers wear MEG-scanner "thought helmets" and carry backpack signal-processing super-computers.¹¹



No Place To Lay Our Targeted Heads

Ten years after Brezhnev's warning, Dr Becker was still issuing the same warning:

"Eventual monitoring of evoked potentials from the EEG, combined with radio-frequency and microwave broadcasts designed to produce specific thoughts or moods such as compliance and complacency, promises a method of mind control that poses immense danger to all societies—tyranny without terror.

"[T]he hypnotic familiarity of TV and radio, combined with the biological effects of their broadcast beams, may already constitute a similar force for mass standardization, whether by design or not."¹²

National Security Agency Signals Intelligence (SIGINT) monitors brain waves via satellite, decodes evoked 5.0-milliwatt potentials of the brain at 3.5 Hz, then transmits them to a very-high-speed integrated circuit (VHSIC) computer monitor for "forced conversations". For "EEG cloning", the target's electromagnetic field is first monitored then decoded via computer software, after which the emotional patterns are fed back to the target's brain—or to another brain. Place a 5.0-micromillimetre microchip in the optic nerve and neural impulses can be drawn from the brain to "eavesdrop" on the implanted person, after which the thoughts are transferred to a computer for storage until being projected back into the brain to be reexperienced as hallucinations, voices from past conversations, etc. In his "Citizen Smith" blog, researcher Paul Baird described the process this way:

"Human thought operates at 5,000 bits/sec but satellites and various forms of biotelemetry can deliver those thoughts to supercomputers in Maryland, USA, Israel, etc. which have a speed of 20 billion bits/sec each. These, even today, monitor millions of people simultaneously.

"Eventually they will monitor almost everyone...worse than any Orwellian Big Brother' nightmare you could possibly imagine, only it will be a reality. Yet our world leaders, who know this, do nothing.

"...Usually the targets are aware their brain waves are being monitored because of the accompanying neurophone feedback. In other words, the computer repeats (echoes) your own thoughts *and* then the human monitors comment or respond verbally.

"Both are facilitated by the neurophone.

"...Whilst the live/human comments are individualistic and unrelated to the victim's own thought processes, oftentimes the artificial intelligence involved will parrot standard phrases. These are triggered by your thoughts while the human monitors remain silent or absent. To comprehend how terrible such a thorough invasion of privacy can be, imagine being quizzed on your past as you lie in bed. You eventually fall off to sleep, having personal or induced' dreams, only to wake to the monitors' commenting/ridiculing your subconscious thoughts (dreams)."¹³

In homes and offices across the nation, millimetre-wave scanners are penetrating walls, looking for target brains for microwave transmitters to beam specific mood-inducing excitation potentials into. Other people in the room will be oblivious to the fact that an excitation potential for suicide or murder is resetting the brain of their friend or relative for depression or rage. (This technology may have been behind the "suicides" of political activist Abbie Hoffman, singer Kurt Cobain, journalist Gary Webb, etc., etc. British scientist Tim Rifat in the UK explained it this way:

"...Intelligence chiefs are now in seventh heaven; if someone becomes a problem they get the 'suicide mind control team' parked outside their house. Within weeks, the victim kills himself.

"If the military intelligence agency does not wish you to commit suicide, they can drive you mad. This is done by beaming the excitation potential of a particular pathological mental state at your brain while you are at home. To aid in this, the intelligence operatives can place sounds and speech in the target victim's brain. This intercerebral hearing is used to drive the victim mad, as no one else can hear the voices transmitted into the brain of the target. Transmission of auditory data directly into the targets' brains using microwave carrier beams is now common practise [sic]."¹⁴

It doesn't take a rocket science degree to see that remote satellite tracking and over-the-horizon technologies are not just about "terrorists". Remote torture and interrogation, memories triggered by Neurophone questioning, and brain-wave analysers delivering "forced conversations" and programming are about the establishment of electronic PoW concentration camps in our own homes and workplaces. They're about mental rape and intellectual property stolen right out of our heads. The silent, invisible, unprovable uses such weapons can be put to is mind-boggling. When Michael Dukakis had the misfortune of running against former CIA Director George H. W. Bush in the 1988 US presidential election, his wife Kitty was driven to the brink of suicide— and yet how could one prove it was due to an EM assault? The thoughts and emotions of millions of targets are being collected and archived on computers for a thousand nefarious uses while the lowest of the low continue to monitor and harass ("gaslight") whomever their masters command.

Does the US Constitution's Fourth Amendment cover the unreasonable search and seizure of minds? Attempts to curb the illegal use of "non-lethal" weapons have so far failed or been toothless:

- Senator John Glenn, who well knows the truth of this technology, introduced a bill called the Human Research Subjects Protection Act of 1997¹⁵ and it failed.

- On 28 January 1999, the European Parliament passed Resolution A4-0005/1999. The draft resolution specifically addressed EMR weapons, but the wording in section 27 of the final resolution included "a global ban on all developments and deployments of weapons which might enable any form of manipulation of human beings".¹⁶
- In 2001, HR2977, the US Space Preservation Act of 2001 was introduced into Congress to ban all directed-energy weapons (DEWs). After several rewrites, it failed to be passed.¹⁷
- In 2002, the United Nations Institute for Disarmament Research formally listed a new category of weapon of mass destruction: Psychotronic Mind Control and other Electromagnetic Resonance Weapons.¹⁸

To my knowledge, the only laws on the books that criminalise the use of EM weapons against citizens are Michigan Public Acts 256 and 257, signed by Canadian-born Governor Jennifer Granholm on 28 December 2003.¹⁹ The penalty, according to Act 257, is 15 years to life—but *are abusers being prosecuted in Michigan?*

Cognitive Warfare

When Senator Church referred to "this agency [the NSA] and all agencies that possess this technology" in 1975, he was not just thinking of the NSA, CIA and FBI but the Defense Intelligence Agency (DIA) as well. The "asymmetric" "Revolution in Military Affairs" has always included *cognitive warfare* that utilises "strategic personality simulations" (multiple personalities) created by MK-ULTRA for varied covert missions. The *cognotechnology of nanotechnology, biotechnology and information technology has always been front and centre*. Intel operatives are traumatised and electroshocked to erase memories, US Navy SEAL assassins are brain-wiped, soldiers are injected with intelligence-manned interface (IMI) biotics so that 20-billion-bit/second NSA supercomputers can track them and see and hear what they experience with a remote monitoring system (RMS).²⁰

Now, the line between civilian and military has been erased and we are all living in the battlespace. Private security firms, mobsters and lowlifes contracting with the intelligence community are doing its dirty work so that congressional oversight can be avoided.²¹ The tasks of such hitmen include the aforementioned "suicide" known in the intel business as "NSA self-initiated executions", the final phase of remotely driven "psychological engineering". Or the hitmen are managing cerebral imaging and dreams at a distance via the scalar component of a weak magnetic field.²²

Nuclear engineer Lt Col. Thomas E. Bearden (Ret.) said in a 1991 interview that scalar electromagnetic phenomena make it possible to construct thought forms to pipe in and input them directly into the mind and long-term memory through what he calls "a hidden channel to pipe in inputs".²³

This is the new *cognitive warfare*, a form of mind control that employs acoustical, optical and electromagnetic fields, or a combination thereof, to interfere with biological processes.²⁴ Voluntary muscle movements can be restrained, emotions and actions controlled, sleep produced or prevented, short- and long-term memories wiped—all by remote control. S4s (Silent Sound Spread Spectrum) on board the EC-130E Commando Solo entrain brain waves, then piggyback stored emotion signature clusters or voice commands on AM, FM, HF, TV or military bands via the military's Omega communications system.

Broadcast preparatory sets encoded on microwave beams produce heart attacks, strokes, paralysis, etc. Illnesses like flu are fired at targets. Buildings where dissident groups meet are turned into instantaneous hot spots. Government abductions are disguised as alien abductions with paralysis beams followed by short-term memory wipes and implantation of false memories. Bugging is now a matter of firing lasers at windows to expose the modulations of sounds inside. Even the subliminals on television and in films have not been eliminated, just improved: embedded low-light images are blended just below the threshold of normal vision to produce *a film within a film*, along with precise digital transmissions of hexadecimal colour codes like the ones in the film *Close Encounters of the Third Kind*—and that was in 1977.

And don't forget the subliminals at concerts and on MP3s.

The public tends to forget that telecommunication corporations are military contractors wielding almost absolute power over communities. Few know that in 1995—the year before the flagrant Telecommunications Act of 1996—the US Department of Defense and Department of Justice via the National Institute of Justice merged the US military, defence contractors, military-endowed science and law enforcement around a joint policy of *dual use* for non-lethal weapons like the ADS, long-range acoustic devices (LRADs) and the remote EM mind-control technologies discussed here, and shifted the Cold War term "external enemy" to "[foreign or domestic] adversary" (now "terrorists")—which in normal English means anyone whose activities displease the military or law enforcement.²⁵

Operation *Weed & Seed* Speaking of communities, Operation *Weed & Seed* is said to be a Department of Justice community development initiative whose intent is to combat violent crime, drug use and gangs. Is it, or does it have another agenda?

In his 1997 book *Mind Control, World Control*, the late researcher Jim Keith related how he lived for three years in

the Tenderloin neighbourhood of San Francisco, where the top of the Federal Building was actually a radar, microwave and radio shield for an array of communications devices. From that roof, you could see anywhere in the Tenderloin, which also meant that radio waves had clear passage in any direction. Given that ELF and ULF emissions (like TV broadcasts) don't pass well through earth or buildings, Keith noticed that his thoughts were disrupted early morning and evening by a low buzzing or humming coming from *inside his head*. He heard neighbours shouting and threatening outside and slowly realised that the Tenderloin was a double-blind experiment being monitored through the police department. Who would take seriously the complaints of anyone poor, mentally unstable or addicted?²⁶

Tim Rifat reported in 1999 that Sussex, UK, police have exclusive use of the 450-MHz microwave frequency on its 200-foot (~61-metre) antenna—the same frequency used by Ross Adey, pulsed at 0.75 mW/cm², for behaviour modification.

This is *the same pulse modulation as in cellphone earpieces*. Pulse an ELF signal at this frequency out to the antennae around town and it will resonate in the pulsed fields around the power lines, reradiate and enter homes through light circuits.²⁷

Hundreds of microwave towers and antennae are going up to accommodate the now 5.0-gigabyte iPhones in a NetRad pulse-modulated grid.²⁸ At the top of each tower is long-wave, tissue-penetrating microwave radiation bombarding everyone below and in its path; at the bottom, video monitors, miniature sensors (magnetic, seismic, infrared, radar and strain electromagnetic) and signals processing supposedly for weather and atmospheric surveillance, detection of biological agents, radiation release, etc.

NetRad was crafted by the military-industrial complex: UMass Microwave Remote Sensing Laboratory, AT&T, Radian/Onex Corporation and other arms of the military contractor octopus protected by the Harvard Center for Risk Analysis, an industry front funded by 100 of the world's largest, most powerful corporations, surely one of the active sponsors of the Telecommunications Act of 1996.

In the guise of consumer convenience, *dual use* technology is arriving in every neighbourhood. Dual use, double jeopardy.

Conclusion

Much of the historical data in this essay comes from CIA testimony given on 21 September 1977 before the Subcommittee on Health and Scientific Research, along with FOIA requests of declassified materials. More information is available on the Internet, thanks to researchers and targets who have directly experienced DEW torture—nonconsensual experimental subjects who are often highly verbal, individualistic people living alone, without good family relations but whose relatives are often connected with intelligence or security services.

Though not all reports are credible, my experience has been that most are—if you are somewhat familiar with how the technology works.

We are lab rats in a Dr Martin Seligman learned helplessness experiment. Our fear and depression, passivity, isolation, poor health, immobility, stress and even madness and suicide are recorded and followed up. Report electronic surveillance and harassment to the police and you are discredited.

Thanks to the *Diagnostic and Statistical Manual of Mental Disorders* crafted by the American Psychiatric Association in part as cover diagnoses for exotic high-tech technologies, check into a psychiatric ward for safety and you'll be diagnosed paranoid schizophrenic and discredited. These weapons may await those Americans who still seek to exercise the vanishing Bill of Rights.

In our cities, we no longer hear or feel the Earth's Schumann resonance at which all of life pulsates. We are imprisoned in an EM fog, slow-boiling frogs in an EM soup. Our biological cycles are off, and chronic stress and disease are mounting. Meanwhile, the medical and pharmaceutical industries grow richer than in their wildest dreams.

As Dr Becker said, the ultimate weapon is manipulation of our EM environment because it's imperceptibly subtle and strikes at the core of life itself while we're on the cellphone or computer, listening to music, watching television or transiting the X-ray scanner at the airport.

It is time to challenge the technological spell we are under and examine the devil's deal we have made with powers who have an "enhanced" transhumanist future in mind for us.

As former US Navy engineer Eleanor White writes:

"For the first time in history, one human being, from hiding, at a distance, can control the thoughts and actions of another by way of undetectable hypnosis, using still-classified electronic technology. These devices have totally disabled the world's justice systems. Zero-evidence weapons make revenge crimes routine and easy."²⁹

Loss of freedom of thought means much more than the loss of a republic. It means the loss of civilisation and what it is to be *human*. These costs of sleeping in our chains of comfort and convenience are too much to pay.

About the Author:

Elana Freeland, based in Olympia, Washington, USA, has been a Waldorf (Steiner) school pioneer, storyteller and lecturer. For the past two decades, she has ghostwritten books on diverse topics and edited the stories of survivors of MK-ULTRA and ritual abuse. She is the author of the *Sub Rosa America* series, a fictional history of the United States since President John F. Kennedy's assassination. She is the author of *Chemtrails, HAARP, and the Full Spectrum Dominance of Planet Earth* (Feral House, 2014; see review in this issue). She can be contacted by email at stargirth@gmail.com.

Endnotes

1. <http://tinyurl.com/mjf3whu>
2. The Schumann resonance is the resonant frequency of the Earth's atmosphere between the surface and the densest part of the ionosphere.
3. Becker, Dr Robert O. and Gary Selden, *The Body Electric: Electromagnetism and the Foundation of Life*, Wm Morrow, 1985, p. 284
4. op. cit., p. 277
5. op. cit., p. 278
6. Snow, Keith Harmon, "NETRAD in the Neighborhood", *Montague Reporter*, 28 February 2004, <http://tinyurl.com/nmp47af>
7. US Government, etc., *21st Century U.S. Military Documents: Air Force Intelligence*, Progressive Management, 2013
8. The LRAD was employed recently against Ferguson, Missouri, protesters. See Lily Hay Newman, "This Is the Sound Cannon Used Against Protesters in Ferguson", *Future Tense*, 14 August 2014, <http://tinyurl.com/ka3g73f>.
9. Becker, op. cit., p. 319
10. "BAA 01-42, Addendum 1, Special Focus Area: Brain Machine Interfaces", <http://tinyurl.com/o25wxzp>
11. Thompson, Mark, "The Army's Totally Serious Mind-Control Project", *Time*, 14 Sep 2008, <http://tinyurl.com/mkxhjuu>
12. Becker, op. cit., p. 320
13. <http://tinyurl.com/olhx8r9>
14. Rifat, Tim, "Microwave Mind Control", <http://www.whale.to/b/rifat.html>. Also see "Remote Viewing" (NEXUS 3/06) and "The ESP of Espionage" (NEXUS 4/0102).
15. <http://tinyurl.com/pjj5lxh>
16. EP, "Resolution on the environment, security and foreign policy", 28 January 1999, <http://tinyurl.com/kcll7be>
17. <http://tinyurl.com/6srz67q>.
18. <http://tinyurl.com/o7uxuye>
19. <http://tinyurl.com/kychtxr>
20. See Rauni-Leena Luukanen-Kilde, MD, "Microchip Implants, Mind Control, and Cybernetics", <http://tinyurl.com/ywj3q>, first published *Spekula*, 3rd Quarter, 1999. Also see Tom Burghardt, "Defense Intelligence Agency Seeking 'Mind Control' Weapons", 24 Aug 2008, <http://tinyurl.com/mhhpwn2>.
21. "Brainwash killers 'still in use'", *HeraldScotland.com*, 26 May 1995, <http://tinyurl.com/nqakhdt>

- 22.** Eldon Byrd, former scientist for Naval Surface Weapons, Office of Non-Lethal Weapons, has published papers on the telemetry of brain waves (measuring them wirelessly from a distance) and the psycho-activity of ELF electromagnetic and scalar fields. See Arlene Tyner, "High Tech Crimes and Electromagnetic Madness", October 2001, <http://tinyurl.com/lqyoznp>.
- 23.** Patten, Terry and Michael Hutchison, "Interview with Lt. Col. Thomas E. Bearden (Ret.)", *Megabrain Report*, 4 February 1991, available at <http://tinyurl.com/k4ca9kv>
- 24.** US Air Force Scientific Advisory Board, New *World Vistas*, 1996 Ancillary Volume (section on "biological process control")
- 25.** For more on this, see LTC Paul R. Capstick, US Army, "Non-Lethal Weapons and Strategic Policy Implications for 21st Century Peace Operations", 26 February 2001, <http://tinyurl.com/n56hum3>.
- 26.** Keith, Jim, *Mind Control, World Control*, Adventures Unlimited Press, USA, 1997
- 27.** Rifat, Tim, "Mind Control in the UK", *The Truth Campaign*, Spring 1999, <http://www.whale.to/b/rifat4.html>
- 28.** Snow, op. cit.
- 29.** Cached at <http://alturl.com/4pwqi>. Eleanor White is an ombudsman for targeted individuals (TIs) experiencing organised stalking (OS) and electronic harassment (EH).

The Benefits Of High Cholesterol

Contrary to consensus thinking and propaganda linking low cholesterol with good cardiac health, numerous studies show that high cholesterol protects against cardiovascular disease, reduces susceptibility to infection and promotes longevity.

by Uffe Ravnskov, MD, PhD

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From the Weston A. Price Foundation's website:

<http://www.westonaprice.org>

Available at the web page:

<http://tinyurl.com/kkkdmoj>

People with high cholesterol live the longest. This statement seems so incredible that it takes a long time to clear one's brainwashed mind to understand its importance fully. Yet the fact that people with high cholesterol live the longest emerges clearly from many scientific papers. Consider the finding of Dr Harlan Krumholz of the Department of Cardiovascular Medicine at Yale University, who reported in 1994 that old people with low cholesterol died twice as often from a heart attack as did old people with high cholesterol.¹ Supporters of the cholesterol campaign consistently ignore his observation or consider it as a rare exception, produced by chance among a huge number of studies finding the opposite.

But it is not an exception; there are now a large number of findings that contradict the lipid hypothesis. To be more specific, most studies of old people have shown that high cholesterol is not a risk factor for coronary heart disease. This was the result of my search in the Medline database for studies addressing that question.² Eleven studies of old people came up with that result, and a further seven studies found that high cholesterol did not predict all-cause mortality either.

Now consider that more than 90 per cent of all cardiovascular disease is seen in people above age 60, and that almost all studies have found that high cholesterol is not a risk factor for women.² This means that high cholesterol is only a risk factor for less than five per cent of those who die from a heart attack.

But there is more comfort for those who have high cholesterol: six of the studies found that total mortality was *inversely* associated with either total or LDL cholesterol, or both. This means that it is actually much better to have high than to have low cholesterol if you want to live to be very old.

High Cholesterol Protects Against Infection

Many studies have found that low cholesterol is in certain respects worse than high cholesterol. For instance, in 19 large studies of more than 68,000 deaths, reviewed by Professor David R. Jacobs and his co-workers from the Division of Epidemiology at the University of Minnesota, low cholesterol predicted an increased risk of dying from gastrointestinal and respiratory diseases.³

Most gastrointestinal and respiratory diseases have an infectious origin. Therefore, a relevant question is whether it is the infection that lowers cholesterol or the low cholesterol that predisposes to infection. To answer this question, Professor Jacobs and his group, together with Dr Carlos Iribarren, followed more than 100,000 healthy individuals in the San Francisco area for 15 years. At the end of the study, those with low cholesterol at the start of the study had been admitted more often to hospital because of an infectious disease.^{4,5} This finding cannot be explained away with the argument that the infection caused cholesterol to go down, because how could low cholesterol, recorded when these people were without any evidence of infection, be caused by a disease which they had not yet encountered? Isn't it more likely that low cholesterol in some way made them more vulnerable to infection, or that high cholesterol protected those who did not become infected? Much evidence exists to support this interpretation.

Low Cholesterol and HIV/AIDS

Young unmarried men with a previous sexually transmitted disease or liver disease run a much greater risk of becoming infected with HIV than do other people. The Minnesota researchers, now led by Dr Ami Claxton, followed such individuals for 7-8 years. After having excluded those who became HIV-positive during the first four years, they ended up with a group of 2,446 men. At the end of the study, 140 of these people tested positive for HIV; those who had low cholesterol at the beginning of the study were twice as likely to test positive for HIV compared with those with the highest cholesterol.⁶

Similar results come from a study of the MRFIT [Multiple Risk Factor Intervention Trial] screenees, including more than 300,000 young and middle-aged men, which found that 16 years after the first cholesterol analysis the number of men whose cholesterol was lower than 160 and who had died from AIDS was four times higher than the number

of men who had died from AIDS with cholesterol above 240.⁷

Cholesterol and Chronic Heart Failure

Heart disease may lead to a weakening of the heart muscle. A weak heart means that less blood and therefore less oxygen is delivered to the arteries. To compensate for the decreased power, the heartbeat goes up, but in severe heart failure this is not sufficient. Patients with severe heart failure become short of breath because too little oxygen is delivered to the tissues; the pressure in their veins increases because the heart cannot deliver the blood away from the heart with sufficient power. These patients become oedematous, meaning that fluid accumulates in the legs and, in serious cases, also in the lungs and other parts of the body. This condition is called congestive or chronic heart failure.

There are many indications that bacteria or other microorganisms play an important role in chronic heart failure. For instance, patients with severe chronic heart failure have high levels of endotoxin and various types of cytokines in their blood. Endotoxin, also named lipopolysaccharide, is the most toxic substance produced by Gram-negative bacteria such as *Escherichia coli*, *Klebsiella*, *Salmonella*, *Serratia* and *Pseudomonas*. Cytokines are hormones secreted by white blood cells in their battle with microorganisms; high levels of cytokines in the blood indicate that inflammatory processes are going on somewhere in the body.

The role of infections in chronic heart failure has been studied by Dr Mathias Rauchhaus and his team at the Medical Department of Martin Luther University in Halle, Germany. They found that the strongest predictor of death for patients with chronic heart failure was the concentration of cytokines in the blood, in particular in patients with heart failure due to coronary heart disease.⁸ To explain their finding, they suggested that bacteria from the gut may more easily penetrate into the tissues when the pressure in the abdominal veins is increased because of heart failure. In accordance with this theory, they found more endotoxin in the blood of patients with congestive heart failure and oedema than in patients with noncongestive heart failure without oedema, and endotoxin concentrations decreased significantly when the heart's function was improved by medical treatment.⁹

A simple way to test the functional state of the immune system is to inject antigens from microorganisms that most people have been exposed to, under the skin. If the immune system is normal, an induration (hard spot) will appear about 48 hours later at the place of the injection. If the induration is very small, with a diameter of less than a few millimetres, this indicates the presence of "anergy", a reduction in or failure of response to recognise antigens.

In accordance, anergy has been found associated with an increased risk of infection and mortality in healthy elderly individuals, in surgical patients and in heart transplant patients. Dr Donna Vredevoe and her group from the School of Nursing and the School of Medicine, University of California, Los Angeles, tested more than 200 patients with severe heart failure with five different antigens and followed them for 12 months. The cause of heart failure was coronary heart disease in half of them and other types of heart disease (such as congenital or infectious valvular heart disease, various cardiomyopathies and endocarditis) in the rest. Almost half of all the patients were anergic, and those who were anergic and had coronary heart disease had a much higher mortality than the rest.¹⁰

Now to the salient point: to their surprise, the researchers found that mortality was higher not only in the patients with anergy but also in the patients with the lowest lipid values, including total cholesterol, LDL cholesterol and HDL cholesterol as well as triglycerides.

The latter finding was confirmed by Dr Rauchhaus, this time in co-operation with researchers at several German and British university hospitals. They found that the risk of dying for patients with chronic heart failure was strongly and inversely associated with total cholesterol, LDL cholesterol and also triglycerides; those with high lipid values lived much longer than those with low values.^{11, 12}

Other researchers have made similar observations. The largest study has been performed by Professor Gregg C. Fonarow and his team at the Department of Medicine and Cardiomyopathy Center, University of California, Los Angeles.¹³ The study, led by Dr Tamara Horwich, included more than 1,000 patients with severe heart failure. After five years, 62 per cent of the patients with cholesterol below 129 mg/L had died, but only half as many of the patients with cholesterol above 223 mg/L had died.

When proponents of the cholesterol hypothesis are confronted with findings showing a bad outcome associated with low cholesterol—and there are many such observations—they usually argue that severely ill patients are often malnourished, and malnourishment is therefore said to cause low cholesterol.

However, the mortality of the patients in this study was independent of their degree of nourishment; low cholesterol predicted early mortality whether the patients were malnourished or not.

Smith-Lemli-Opitz Syndrome

As discussed in *The Cholesterol Myths*, much evidence supports the theory that people born with very high cholesterol, so-called familial hypercholesterolaemia, are protected against infection. But if inborn high cholesterol

protects against infections, inborn low cholesterol should have the opposite effect. Indeed, this seems to be true.

Children with the Smith-Lemli-Opitz syndrome have very low cholesterol because the enzyme that is necessary for the last step in the body's synthesis of cholesterol does not function properly. Most children with this syndrome are either stillborn or die early because of serious malformations of the central nervous system. Those who survive are "imbecile"; they have extremely low cholesterol and suffer from frequent and severe infections. However, if their diet is supplemented with pure cholesterol or extra eggs, their cholesterol goes up and their bouts of infection become less serious and less frequent.¹⁴

Laboratory Evidence Laboratory studies are crucial for learning more about the mechanisms by which the lipids exert their protective function. One of the first to study this phenomenon was Dr Sucharit Bhakdi, from the Institute of Medical Microbiology, University of Giessen, Germany, along with his team of researchers from various institutions in Germany and Denmark.¹⁵

Staphylococcus aureus alpha-toxin is the most toxic substance produced by strains of the disease-promoting bacterium *Staphylococcus*. It is able to destroy a wide variety of human cells, including red blood cells. For instance, if minute amounts of the toxin are added to a test tube with red blood cells dissolved in 0.9% saline, the blood is haemolysed; that is, the membranes of the red blood cells burst and haemoglobin from the interior of the red blood cells leaks out into the solvent. Dr Bhakdi and his team mixed purified alpha-toxin with human serum (the fluid in which the blood cells reside) and saw that 90 per cent of its haemolysing effect disappeared. By various complicated methods, they identified the protective substance as LDL, the carrier of the so-called bad cholesterol. In accordance, no haemolysis occurred when they mixed alpha-toxin with purified human LDL, whereas HDL or other plasma constituents were ineffective in this respect.

Dr Willy Flegel and his co-workers at the Department of Transfusion Medicine, University of Ulm, and the Institute of Immunology and Genetics at the German Cancer Research Centre, Heidelberg, in Germany, studied endotoxin in another way.¹⁶ As mentioned, one of the effects of endotoxin is that white blood cells are stimulated to produce cytokines. The German researchers found that the cytokine-stimulating effect of endotoxin on the white blood cells disappeared almost completely if the endotoxin was mixed with human serum for 24 hours before the white blood cells were added to the test tubes. In a subsequent study¹⁷, they found that purified LDL from patients with familial hypercholesterolaemia had the same inhibitory effect as the serum.

LDL may not only bind with and inactivate dangerous bacterial toxins; it seems to have a direct beneficial influence on the immune system also, possibly explaining the observed relationship between low cholesterol and various chronic diseases.

This was the starting point for a study by Professor Matthew Muldoon and his team at the University of Pittsburgh, Pennsylvania. They studied healthy young and middle-aged men and found that the total number of white blood cells and the number of various types of white blood cells were significantly lower in the men with LDL cholesterol below 160 mg/dL (mean 88.3 mg/L) than in the men with LDL cholesterol above 160 mg/L (mean 185.5 mg/L).¹⁸ The researchers cautiously concluded that there were immune system differences between men with low and high cholesterol, but that it was too early to state whether these differences had any importance for human health.

Now, seven years after this study and considering the results of many other studies discussed here, we are allowed to state that the immune-supporting properties of LDL cholesterol do indeed play an important role in human health.

Other Protecting Lipids

As seen from the above, many of the roles played by LDL cholesterol are shared by HDL. This should not be too surprising, considering that high HDL cholesterol is associated with cardiovascular health and longevity. But there is more.

Triglycerides—molecules consisting of three fatty acids linked to glycerol—are insoluble in water and therefore are carried through the blood inside lipoproteins, as is cholesterol. All lipoproteins carry triglycerides, but most of them are carried by a lipoprotein named VLDL (very-low-density lipoprotein) and by chylomicrons, a mixture of emulsified triglycerides appearing in large amounts after a fat-rich meal, particularly in the blood that flows from the gut to the liver.

For many years it has been known that sepsis, a life-threatening condition caused by bacterial growth in the blood, is associated with a high level of triglycerides. The serious symptoms of sepsis are due to endotoxin, most often produced by gut bacteria.

In a number of studies, Professor Hobart W. Harris at the Surgical Research Laboratory at San Francisco General Hospital and his team found that solutions rich in triglycerides but with practically no cholesterol were able to protect experimental animals from the toxic effects of endotoxin, and they concluded that the high level of triglycerides seen in sepsis is a normal immune response to infection.²¹ Usually the bacteria responsible for sepsis come from the gut. It is therefore fortunate that the blood draining the gut is especially rich in triglycerides.

Serious infections caused by *Candida albicans* are rare in normal human beings; they are mainly seen in patients treated with immunosuppressive drugs, but the finding shows that we need more knowledge in this area. However, the many findings mentioned above indicate that the protective effects of the blood lipids against infections in humans seem to be greater than any possible adverse effects.

Cholesterol as a Risk Factor

Most studies of young and middle-aged men have found high cholesterol to be a risk factor for coronary heart disease, seemingly a contradiction to the idea that high cholesterol is protective. Why is high cholesterol a risk factor in young and middle-aged men? A likely explanation is that men of that age are often in the midst of their professional career. High cholesterol may therefore reflect mental stress, a well-known cause of high cholesterol and also a risk factor for heart disease.

Again, high cholesterol is not necessarily the direct cause but may only be a marker. High cholesterol in young and middle-aged men could, for instance, reflect the body's need for more cholesterol because cholesterol is the building material of many stress hormones. Any possible protective effect of high cholesterol may therefore be counteracted by the negative influence of a stressful life on the vascular system.

Response to Injury

In 1976, one of the most promising theories about the cause of atherosclerosis was the *response-to-injury hypothesis*, presented by Dr Russell Ross, a professor of pathology, and Dr John Glomset, a professor of biochemistry and medicine, at the University of Washington School of Medicine in Seattle.^{23, 24} They suggested that atherosclerosis is the consequence of an inflammatory process, where the first step is a localised injury to the intima, the thin layer of cells lining the inside of the arteries. The injury causes inflammation, and the raised plaques that form are simply healing lesions.

Their idea is not new. In 1911, two American pathologists, Oskar Klotz and M. F. Manning, from the Pathological Laboratories, University of Pittsburgh, Pennsylvania, published a summary of their studies of the human arteries and concluded that "there is every indication that the production of tissue in the intima is the result of a direct irritation of that tissue by the presence of infection or toxins or the stimulation by the products of a primary degeneration in that layer".²⁵ Other researchers have presented similar theories.²⁶

Researchers have proposed many potential causes of vascular injury, including mechanical stress, exposure to tobacco fumes, high LDL cholesterol, oxidised cholesterol, homocysteine, the metabolic consequences of diabetes, iron overload, copper deficiency, deficiencies of vitamins A and D, consumption of *trans* fatty acids, microorganisms and many more. With one exception, there is evidence to support roles for all of these factors, but the degree to which each of them participates remains uncertain. The exception is, of course, LDL cholesterol.

Much research allows us to exclude high LDL cholesterol from the list. Whether we look directly with the naked eye at the inside of the arteries at autopsy or we do it indirectly in living people using X-rays, ultrasound or electron beams, no association worth mentioning has ever been found between the amount of lipid in the blood and the degree of atherosclerosis in the arteries. Also, whether cholesterol goes up or down, by itself or due to medical intervention, the changes of cholesterol have never been followed by parallel changes in the atherosclerotic plaques; there is no dose-response relationship. Proponents of the cholesterol campaign often claim that the trials indeed have found dose-response, but here they refer to calculations between the mean changes of the different trials with the outcome of the whole treatment group. However, true dose-response demands that the individual changes of the putative causal factor are followed by parallel, individual changes of the disease outcome, and this has never occurred in the trials where researchers have calculated true dose-response.

A detailed discussion of the many factors accused of harming the arterial endothelium is beyond the scope of this article. However, the protective role of the blood lipids against infections obviously demands a closer look at the alleged role of one of the alleged causes: the microorganisms.

Is Atherosclerosis an Infectious Disease?

For many years, scientists have suspected that viruses and bacteria, in particular *Cytomegalovirus* and *Chlamydia pneumoniae* (also named TWAR [Taiwan acute respiratory agent] bacteria) participate in the development of atherosclerosis. Research within this area has exploded during the last decade, and by January 2004 at least 200 reviews of the issue had been published in medical journals. Due to the widespread preoccupation with cholesterol and other lipids, there has been little general interest in the subject, however, and few doctors know much about it. Here I shall mention some of the most interesting findings.²⁶

Electron microscopy, immunofluorescence microscopy and other advanced techniques have allowed us to detect microorganisms and their DNA in the atherosclerotic lesions in a large proportion of patients. Bacterial toxins and cytokines, hormones secreted by the white blood cells during infections, are seen more often in the blood from patients with recent heart disease and stroke, in particular during and after an acute cardiovascular event, and some of them are strong predictors of cardiovascular disease. The same is valid for bacterial and viral antibodies,

and a protein secreted by the liver during infections, named C-reactive protein (CRP), is a much stronger risk factor for coronary heart disease than is cholesterol.

Clinical evidence also supports this theory. During the weeks preceding an acute cardiovascular attack, many patients have had a bacterial or viral infection. For instance, Dr Armin J. Grau, from the Department of Neurology at the University of Heidelberg, Germany, and his team asked 166 patients with acute stroke, 166 patients hospitalised for other neurological diseases and 166 healthy individuals matched individually for age and sex about recent infectious disease. Within the first week before the stroke, 37 of the stroke patients but only 14 of the control individuals had had an infectious disease. In half of the patients, the infection was of bacterial origin; in the other half, it was of viral origin.²⁷

Similar observations have been made by many others for patients with acute myocardial infarction (heart attack). For instance, Dr Kimmo J. Mattila, at the Department of Medicine, Helsinki University Central Hospital, Finland, found that 11 of 40 male patients with an acute heart attack before age 50 had had an influenza-like infection with fever within 36 hours prior to admittance to hospital. However, only four out of 41 patients with chronic coronary disease (such as recurrent angina or previous myocardial infarction) and four out of 40 control individuals without chronic disease randomly selected from the general population had had an influenza-like infection with fever.²⁸

Attempts have been made to prevent cardiovascular disease by treatment with antibiotics. In five trials, treatment of patients with coronary heart disease using azithromycin or roxithromycin, antibiotics that are effective against *Chlamydia pneumoniae*, yielded successful results; a total of 104 cardiovascular events occurred among the 412 non-treated patients, but only 61 events occurred among the 410 patients in the treatment groups.^{28a-e} In one further trial, a significant decreased progression of atherosclerosis in the carotid arteries occurred with antibiotic treatment.^{28f} However, in four other trials^{30a-d}, one of which included more than 7,000 patients^{28d}, antibiotic treatment had no significant effect.

The reason for these inconsistent results may be that the treatment was too short (in one of the trials, treatment lasted only five days). Also, *Chlamydia pneumoniae*, the TWAR bacteria, can only propagate inside human cells and when located in white blood cells they are resistant to antibiotics.³¹ Treatment may also have been ineffective because the antibiotics used have no effect on viruses.

In this connection, it is interesting to mention a controlled trial performed by Dr Enrique Gurfinkel and his team from Fundacion Favaloro in Buenos Aires, Argentina.³² They vaccinated half of 301 patients with coronary heart disease against influenza, a viral disease.

After six months, 8.0 per cent of the control patients had died compared with only 2.0 per cent of the vaccinated patients. It is worth mentioning that this effect was much better than that achieved by any statin trial, and in a much shorter time.

Does High Cholesterol Protect Against Cardiovascular Disease?

Apparently, microorganisms play a role in cardiovascular disease. They may be one of the factors that start the process by injuring the arterial endothelium. A secondary role may be inferred from the association between acute cardiovascular disease and infection. The infectious agent may preferably become located in parts of the arterial walls that have been previously damaged by other agents, initiating local coagulation and the creation of a thrombus (clot) and in this way causing obstruction of the blood flow. But if so, high cholesterol may protect against cardiovascular disease instead of being the cause!

In any case, the diet-heart idea, with its demonising of high cholesterol, is obviously in conflict with the idea that high cholesterol protects against infections. Both ideas cannot be true. Let me summarise the many facts that conflict with the idea that high cholesterol is bad.

If high cholesterol were the most important cause of atherosclerosis, people with high cholesterol should be more atherosclerotic than people with low cholesterol. But as you know by now, this is very far from the truth.

If high cholesterol were the most important cause of atherosclerosis, lowering of cholesterol should influence the atherosclerotic process in proportion to the degree of its lowering. But as you know by now, this does not happen.

If high cholesterol were the most important cause of cardiovascular disease, it should be a risk factor in all populations, in both sexes, at all ages, in all disease categories, and for both heart disease and stroke. But as you know by now, this is not the case.

I have only two arguments for the idea that high cholesterol is good for the blood vessels, but, in contrast to the arguments claiming the opposite, they are very strong. The first one stems from the statin trials. If high cholesterol were the most important cause of cardiovascular disease, the greatest effect of statin treatment should have been seen in patients with the highest cholesterol and in patients whose cholesterol was lowered the most. Lack of dose-response cannot be attributed to the knowledge that the statins have other effects on plaque stabilisation, as this would not have masked the effect of cholesterol lowering, considering the pronounced lowering that was achieved.

On the contrary, if a drug that effectively lowers the concentration of a molecule assumed to be harmful to the cardiovascular system and at the same time exerts several beneficial effects on the same system, a pronounced dose-response should be seen.

On the other hand, if high cholesterol has a protective function, as suggested, its lowering would counterbalance the beneficial effects of the statins and thus work against a dose-response, which would be more in accord with the results from the various trials.

I have already mentioned my second argument, but it can't be said too often: high cholesterol is associated with longevity in old people.

It is difficult to explain away the fact that during the period of life in which most cardiovascular disease occurs and from which most people die (and most of us die from cardiovascular disease), high cholesterol occurs most often in people with the lowest mortality.

How is it possible that high cholesterol is harmful to the artery walls and causes fatal coronary heart disease, the commonest cause of death, if those whose cholesterol is the highest live longer than those whose cholesterol is low?

To the public and the scientific community I say, "Wake up!"

About the Author:

Uffe Ravnskov, MD, PhD, is a Danish independent scientific researcher and a former private medical practitioner in Sweden. In 1961 he received his medical doctorate from the University of Copenhagen, and in 1973 his PhD in internal medicine and nephrology from the Lund University Hospital, Sweden, where from 1975 to 1979 he was an assistant professor in the Department of Nephrology. In 1979 he entered private practice in Lund as a family doctor until he retired in 2000 to continue his research into the flawed foundations of the diet-heart hypothesis.

Dr Ravnskov is the author of the landmark book *The Cholesterol Myths* (New Trends Publishing, USA, 2000; reviewed in NEXUS 8/02), and an updated version, *Fat and Cholesterol are GOOD for You!* (GB Publishing, Sweden, 2009). He is a member of the International Science Oversight Board and a director of The International Network of Cholesterol Skeptics (THINCS; <http://thincs.org>). He can be contacted via his website, <http://www.ravnskov.nu/uffe.htm>.

Editor's Note:

This is an edited version of an article which first appeared in the Spring 2004 edition of *Wise Traditions in Food, Farming and the Healing Arts*, the quarterly journal of the Weston A. Price Foundation (see website <http://www.westonaprice.org>). Because of space constraints, we are unable to publish the complete version of this article with accompanying endnotes and sidebars. To see this, go to <http://tinyurl.com/kkkdmoj>.



The Nazi Bell, Antigravity And The Secret Apollo Space Program

by Jeff Smith © September 2014

The great German-American theoretical physicist Friedwardt Winterberg stated that the generation of gigaelectronvolt (GeV) potentials, made possible in the ultra-high vacuum of space, has the capability of leading to a workable antigravity propulsion system for spaceflight.

It is the ultra-high vacuum of space by which this can be achieved; and if the spacecraft acting as a capacitor is charged up to GeV potentials in a total vacuum, it will levitate.

If the spacecraft is positively charged against the electron cloud surrounding the craft, and with a magnetic field in the order of 10,000 gauss, it becomes insulated against the Earth's electron cloud up to GeV potentials. The spacecraft and its surrounding electron cloud form a virtual diode with a GeV potential difference. This in turn produces positive magnetic buoyancy (antigravity) in the spacecraft.

This is also the basis of the Biefeld-Brown effect and the working mechanism behind the crude electrostatic ion-lifters used by amateur experimenters into electrogravitics.

Recently declassified US Department of Energy/Department of Defense research conducted by Winterberg and other physicists working on the relationship between plasma and gravity has disclosed a number of interesting and yet publicly unknown facts about the true nature of gravity. This information has been kept secret for over 50 years.

The primary basis of the *magnetic buoyancy theory of gravity* is the simple concept of *hydromagnetic displacement*. This dates back to James Clerk Maxwell's original 1868 displacement theory and his lines-of-force theory.

Simply put, a plasma if charged to a high-enough density will act as a superconductor and will repel all external magnetic and electrostatic fields. If the area of the plasma is great enough, *positive buoyancy* or *antigravity* occurs.

Normally on Earth, we absorb the magnetic field lines causing *negative buoyancy*—or what is referred to as *terrestrial gravity*. The magnetic lines of force pull you to the surface of the Earth. The gyroscope and the induction coil prove this to be true.

No object can shield itself from this form of magnetism unless it is shielded by a high-density plasma sheet—a basic Faraday cage effect for gravity.

A gyroscope actually locks on to these lines of force due to the *homopolar motor generator effect*, producing the so-called *gyroscopic effect*. For antigravity you just block or push out the lines of force and you become weightless.

There is no mathematics needed to explain the basic theory of gravity. You just need to teach it correctly. Unfortunately, the connection between plasma and gravity was not known until World War II. By then, it was classified as a military secret and kept locked up that way for over 70 years.

Researchers into nuclear plasma ball effects at Sandia National Laboratories and other laboratories have made great progress in this technology since it was first discovered during the testing phase of the atomic bomb in World War II.

During the war, this effect was first discovered by scientists while working on the German atomic bomb program, commonly known as the Nazi *Bell Project*. It was later weaponised and tested at the Peenemunde Army Research Centre for use in a potential spaceflight program by Dr Wernher von Braun and company. After the war, the technology was transferred to the USA under Operation *Paperclip*.

The early research into this technology was first assigned to Larry Bell of Bell Aircraft Corporation. After Bell's death, North American Aviation and Grumman took over the research. Both companies were the prime contractors for the Apollo Command/ Service Module (CSM) and Lunar Module (LM).

The very-high-voltage generator circuitry—called a *Marx generator*—that produced this effect was hidden in the upper section of the CSM within the emergency escape rocket and acted as the upper electrode for the system. The rocket body acted as the lower electrode. This was part of the so-called "Apollo weight reduction program".

Edward Leedskalnin of "Coral Castle" fame once said: "If you put my invention into the nose of a rocket, you will have no problem going to the Moon." Apparently he had no idea as to how correct he was.

With the LM, the entire system worked by charging its outer skin to an extremely high voltage in the millions of volts. The system could not be tested on Earth due to the capacitive plates shorting out—unless they were placed in a total vacuum chamber.

For this reason, NASA constructed an extremely large vacuum test chamber, called the "environmental test chamber" as its cover. To hide the system in full view, they came up with the story of covering the LM with a "micrometeorite shield". This was in fact the outer capacitive plates used for charging the LM up to the power levels needed in order to repel the magnetic lines of force and the electron cloud potential (charge) of the Moon.

It took over three minutes to fully charge up the LM before zero gravity was reached. The term used during the spaceflights was to "warm up the LM".

The very-high-voltage power supply, called a *Wimshurst generator*, was disguised as the central gyroscope for the spacecraft in order to ensure flight stability. This is why the LM and all UFOs can only move in an up-down, left-right, forward-backward motion while in flight.

It was centred directly over the 500-pound [~ 227 kilogram] kick motor that could run for only a maximum of 30 seconds before burnout. With both the kick motor and the on-board magnetic buoyancy system in operation, the LM had to be able to dock with the CSM within three orbits.

If the weight reduction system failed to work, the LM could not take off; weighing in at over 3,000 pounds [$\sim 1,361$ kilograms] with only a 500-pound kick motor to lift it, it would be futile.

During the Apollo 13 mission, the weight reduction system was used to return the astronauts safely back to Earth. Astronaut James Lovell was quoted as saying that "the damned thing bucked like hell and it was all they could do to control it".

One slip and they would have shot off into space, never to be seen again.

Electron Disconnect, Magnetic Buoyancy And The Antigravity Effect Of A Nuclear Fireball

by Jeff Smith © September 2014

It is well known that even small detonations of chemical explosives will produce electromagnetic pulses, so it is not surprising that similar pulses are produced in nuclear explosions.

The first type of explosion is associated with the creation, by radiation from the burst, of some kind of asymmetry in the electric charge distribution surrounding the region of detonation. The second is the result of rapid expansion of the essentially perfectly conducting plasma in the Earth's magnetic field.

The first is called the *Compton electron model*. The other is called the *field displacement model*. Field displacement occurs when the expansion of the plasma fireball is restricted into a more or less spherically symmetrical manner by the surrounding material.

When the electron field density of the plasma fireball reaches over 3×10^3 per cubic centimetre, *electron disconnect* between the plasma fireballs, atoms and the electromagnetic field of the Earth will occur. This produces an antigravity effect that allows the plasma fireball to repel and rise up against gravity. This is due to a substantial difference in the magnetic field density of the Earth and the electron field density of the plasma fireball. It is called *magnetic buoyancy*.

Electromagnetic buoyancy occurs when the Earth's magnetic field lines are very rapidly stretched, expanded or moved due to the presence of the hot, expanding plasma in the nuclear fireball. This produces a form of electromagnetic buoyancy similar to standard hydrodynamic buoyancy. It is a *magnetohydrodynamic process* which can be demonstrated in any charged plasma if the plasma's electron density is high enough and the plasma losses are low enough to be negligible.

Immediately after the detonation of a plasma fireball, the highly ionised vapour or plasma expands rapidly. A property possessed by all plasmas is a tendency to exclude a magnetic field from its interior. The expanding plasma thus causes a violent distortion of the Earth's magnetic field as a result of the interaction between the Earth's magnetic field and the charged particles in the expanding plasma and surrounding ionised gases. This disturbance propagates away as a *hydrodynamic wave*.

A plasma in a magnetic field always tends to exclude the magnetic field lines from its interior. Hence, when the plasma expands it will cause the Earth's magnetic field lines to expand or to be stretched in such a way that they remain outside the conducting volume of plasma. This produces an electron disconnect between the charged particles in the plasma and the local electromagnetic field of the Earth. In this state, magnetic buoyancy occurs.

When part of the plasma ball becomes electrically neutral by recombination of the ions and electrons, it will no longer be affected by the Earth's magnetic field so it can now escape from the region of confinement. The remainder of the gas which is still charged will be recompressed.

About the Author.

Jeff Smith has a degree in electrical engineering, applied science and physics. He is a former nuclear weapons specialist with the US government and a former UN weapons inspector specialising in nuclear nonproliferation issues. He is now semiretired and works for a private nonprofit research library as a cryptographic curator and historian, preserving restricted documents that are of historic and scientific value. Correspondence for Mr Smith can be emailed to editor@nexusmagazine.com

Cosmonauts On UFOs And Strange Phenomena

Soviet and Russian cosmonauts have risked their careers by talking about unusual phenomena in space, ranging from unidentified craft, anomalous clouds, mysterious sounds and music, angelic beings, weird whispers that urge them to return to Earth, and an inexplicable scent.

by Paul Stonehill
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Email: rurcla@hotmail.com

Sights and Sounds in Low Earth Orbit

Soviet and, later, Russian cosmonauts have observed interesting, unusual and often inexplicable phenomena while in space. Some of them have talked about their experiences, although doing so is not encouraged by their space program. A cosmonaut is a person trained by a human spaceflight program to command, pilot or serve as a crew member of a spacecraft. Cosmonauts are professional space travellers.

Cosmonaut Vladimir Lyakhov once remarked about a very unusual phenomenon he observed from his spaceship while looking down on Earth. Two gigantic waves ascended from the waters of the Indian Ocean and crashed into each other. The mass of water resulting from the crash seemed to be a giant mountain that vanished in an instant. (The information was published in the popular Soviet magazine *Tekhnika-Molodezhi*, issue 3, 1980.) Cosmonaut Vladimir Kovalyonok reported a very similar water pillar of over 100 kilometres in height in the Timor Sea near Australia (NLO magazine, 10-11, 1996).

Cosmonaut and scientist Yevgeny Khrunov remarked back in 1979, in an article published in *Tekhnika-Molodezhi* (issue 3), that UFOs cannot be denied because thousands of people have observed them. Properties of unidentified objects simply astound the imagination, he said. He was as outspoken in another interview a year later. This was in pre-*perestroika* times, and Khrunov could not really speak freely. However, cosmonaut Aleksey Gubarev went a step further, admitting that he believed in aliens. Interestingly enough, he mentioned that the Americans had at their disposal information that confirmed his belief. (*Tekhnika-Molodezhi*, issue 1, 1980)

Cosmonaut Valery Rozhdestvensky, who does not believe in the presence of extraterrestrial civilisation anywhere in close vicinity to us, revealed knowledge about secret rumours or information that those outside of special circles (i.e., in the Soviet space program and the military) could not know. In an article in *Tekhnika-Molodezhi* (issue 10, 1980), Rozhdestvensky stated that he did not believe that a "small green man" actually knocked on the porthole of a Soyuz spaceship.

Russian UFO researchers have managed to collect more information about cosmonauts and strange phenomena. An article published in Leningrad's *Spektra* newspaper (issue 8, 1992), after the demise of the Soviet Union, lists several incidents:

- In 1976, cosmonaut Valery Kubasov told a reporter that he and others had numerous facts that prove the existence of UFOs. This was the year of the famous Tehran UFO incident.
- On 15 August 1978, cosmonaut Vladimir Kovalyonok observed a strange object from the Salyut 6 space station; it approached and distanced itself repeatedly.
- Cosmonauts Valery Ryumin and Leonid Popov, while aboard Salyut 6 on 14-15 June 1980, observed a group of white, glowing dots that took off in the area of Moscow and flew into space above their station. They reported it to ground control.
- An interesting sighting took place on 2 September 1978 when Soviet cosmonauts Vladimir Kovalyonok and Aleksandr Ivanchenkov observed the shadow of the Salyut 6 orbital station over the clouds. The shadow had a very strange orange-reddish colour. What's more amazing, it changed its size. Previously, on 25 August, both cosmonauts had observed iridescent clouds: green, purple, reddish, blue and even violet. Other Soviet cosmonauts, Vitaly Sevastyanov and Pyotr Klimuk, reported silvery clouds.

Sevastyanov was mesmerised by their dull, occasionally pearly white, cold, glitter. The structure of such clouds was either very thin or bright on the edges of the pitch-dark sky, or transparent, resembling the wings of a swan.

These clouds are said to be a magical spectacle, but their origin remains unexplained.

Distinguished Russian astronomer Vitold Tserasky first reported them in 1885. The clouds are the highest in the Earth's atmosphere, located at an altitude of 70-90 kilometres. They consist of diffused particles, but their nature is still unclear.

Colonel Yuri Nazarov, former deputy commander of the Soviet Mission Control Centre (Tsentri upravleniya poletom in Russian), recalled that on 29 August 1978 cosmonauts Kovalyonok and Ivanchenkov (mentioned earlier) and the newly arrived cosmonaut Valery Bykovsky and East German cosmonaut Sigmund Jahn had observed an unidentified, large-sized, spherical object that flew around Salyut 6.



Salyut 6 Soviet Orbital space station with Soyuz spacecraft docked (right). Image source: http://www.spacefacts.de/graph/photo/photos2/soyuz-t-4_salyut.jpg

After the cosmonauts returned to Earth, renowned Soviet UFO researcher Vladimir Ajaja (whose curiosity and lectures were not always tolerated by the Party) approached Bykovsky for some explanations, but the cosmonaut only admitted that they did observe something inexplicable from aboard the Salyut. (Vladimir Ajaja, *Znakomtes'*, NLO or "Meet the UFOs", booklet, 1990)

Cosmonaut Georgy Grechko reported seeing a strange being of gigantic dimensions over Mongolia. Grechko and Yuri Romanenko also reported to the Tsentri that while in their orbital station over the Falkland Islands they had actually observed huge letters. The photograph they took was delivered to Earth by visiting cosmonauts Vladimir Dzhanibekov and Oleg Makarov. (Gennady Lisov, NLO magazine, issue 45, 8 November 1999) Cosmonaut Vladislav Volkov recalled the inexplicable noises he had heard in space through his headset intercom: the sounds of dogs barking and, later, babies crying. The cosmonaut was in orbit around the Earth on Soyuz 7 in October 1969, and yet he heard those strange noises. To his death, he was not able to explain what he'd heard at the time. Volkov perished in the Soyuz 11 capsule on re-entry on 30 June 1971. (NLO magazine, *ibid.*)

Cosmonauts Yuri Gagarin and Aleksey Leonov heard music that the former explained as "not of this Earth". Not everything could be explained by sensory deprivation. Nor did everyone involved attempt to seek explanations. (NLO magazine, *ibid.*)

Cosmonaut Yuri Malyshev said that when it comes to UFOs, probably no one in the world can say what they are. It is impossible to refute similar phenomena, for they have been witnessed by thousands or tens of thousands of people. However, the physical nature of the UFO phenomenon remains indeterminate, he noted. (*Tekhnika-Molodezhi*, issue 11, 1981)

At the beginning of 1981, cosmonaut Vladimir Aksyonov was more cautious. He said that cosmonauts often observe peculiar light phenomena of an as-yet-inexplicable nature. The contemporary stage of research into the phenomena, he said, is similar to the early establishment of such sciences as zoology and botany, when the naturalists simply described unknown species of animals and plants. (*Tekhnika-Molodezhi*, issue 1, 1981)

On 12 July 1982, Soviet cosmonauts Georgy Beregovoy and Valentin Lebedev were able to observe an unusual drop-shaped object on the Salyut 7 monitor screen. It ascended between the orbital space station and the Progress 14 craft. The object, at a distance of 200 metres, could have been the size of a spaceship. The cosmonauts reported their sighting to the Tsentri.

This information comes from books by Gherman Kolchin, a former Soviet colonel and a UFO phenomenon researcher and author (for example, NLO: *fakty I dokumenty* or "UFOs: facts and documents", 2001).

Kolchin also recalled speaking in April 1989 with cosmonaut Pyotr Klimuk, who confirmed that he does not refute the existence of UFOs (Gherman Kolchin, *Fenomenon NLO: vzglyad iz Rossii* or "UFO Phenomenon: The View from Russia", St Petersburg, 1994).

An interesting article was published in *Sputnik* magazine in 1980 on perception of UFOs by cosmonauts and astronauts. It contains stories told by 10 Soviet and American space explorers. Only one did not refute the possibility of UFOs coming to our galaxy.

Yevgeny Khrunov actually mentioned that it is not possible to deny the presence of UFOs in our galaxy. Thousands of people have observed them. Maybe they are just optical illusions, he said, but some of their characteristics—for instance, the 90-degree change of their flight course—boggle the imagination.

Cosmonaut Gennady Strekalov mentioned that he'd seen strange phenomena several times but is hesitant to classify these sightings as UFOs. However, he said that his colleagues did see "flying saucers" and he envies them. Strekalov did not provide details about their sightings. He described the phenomenon he'd observed on 28 September 1990 during his sojourn on the space station Mir: a sphere over Newfoundland at an altitude of 20-30 kilometres. The atmosphere was clear and visibility was perfect. The sphere was beautiful and it changed colours. It remained visible for 10 seconds, and then vanished instantly. Strekalov remembered that it had a perfect shape. He said that he'd reported the incident to the Mission Control Centre but did not classify it as a UFO.

Cosmonauts must be cautious, he said. Cosmonaut Gennady Manakov was with Strekalov aboard Mir and observed the same phenomenon. (*Rabochaya Tribuna*, 16 October 1990)

The 1984 Salyut 7 Incident

An incredible event took place in 1984 aboard the Salyut 7 orbital station. In view of the dominant ideology, this incident was quite embarrassing to the Soviet regime and was hushed up for years. The popular Russian magazine NLO (issue 9, 1998) carried an account of the incident. The crew at the time comprised six cosmonauts: Leonid Kizim, Oleg At'kov, Vladimir Solovyov, Svetlana Savitskaya, Igor Volk and Vladimir Dzhanibekov. The incident began on the 155th day of the station's flight. The crew was busy with planned experiments, tests and scientific observations and was about to start medical experiments. All of them were experienced, skilled cosmonauts. Then, something that was out of their experience, knowledge and understanding occurred. In front of the Salyut 7 station, out of nowhere, a large orange gas cloud suddenly appeared, its origin unknown. The cosmonauts immediately informed the Tsentr.

While the astonished Tsentr was analysing the report, Salyut 7 entered the cloud. The crew had the brief impression that the orange cloud had entered their station. They were all engulfed by the mysterious orange glow, blinded and out of contact with their comrades. However, their sight was restored quickly. The cosmonauts stumbled to the station's portholes. What they saw left them speechless. They could easily discern seven gigantic shapes inside the orange cloud. Their political ideals and their faith in Marxist-Leninist ideology were gone in a flash. None doubted their eyes. None questioned that the shapes turned out to be seven heavenly angels. The angels looked so much like humans, and yet they were different: they possessed huge wings and blinding haloes. When the angels gazed upon the Soviet crew, they did so with the most wonderful smiles of joy and rapture; no human could smile like that. Ten minutes went by quickly. As the clock ticked away, the angels disappeared along with their cloud. The crew of Salyut 7 felt a devastating loss. But the Tsentr was demanding a further explanation. When the cosmonauts' report was received by the Tsentr, it was classified as Top Secret.

Soon, a special team of doctors was assembled to study the cosmonauts' well being. The crew was then ordered to measure its own physical and mental health instead of carrying out further experiments in space. The tests indicated that the cosmonauts were well and of sound mind.

This incident took place before the *perestroika* period. In order to prevent unnecessary furore, the Politburo made sure that the report remained secret. The Salyut 7 crew was warned to keep silent. No angels could exist inside or outside the Soviet Union.

The Space Whisper

There are still episodes of Soviet space exploration that are not widely discussed in Russia. Among them are accounts of the so-called "Space Whisper" which have appeared in the Russian media. The author of at least one of these is Russian journalist Maria Vetrova. The following account is from *Press-Extra*, issue 135, 1997.

A former cosmonaut, referred to as "cosmonaut X", revealed some information but demanded that he remain anonymous.

He recalled that Soviet cosmonauts heard hushed-up rumours about the Whisper, but they did not share definitive information among them or report anything to the doctors. They were afraid that the latter would remove them from the space program.

Cosmonaut X believed the rumours to be a legend created by the first team of Soviet cosmonauts, to scare the greenhorns. He was wrong. Cosmonaut X and his comrade were aboard a Soviet spacecraft, flying over the Earth's southern hemisphere, when the Whisper came to them. He suddenly felt as if someone else was next to them.

He felt that some invisible being was staring into his back, and it was a hard gaze. The cosmonaut had no doubt that he was being observed. A second later, his comrade, the flight engineer, who was looking out through the porthole, turned around sharply and looked about him. Both were quite ordinary people, far removed from any mystical beliefs, but they were good friends who'd known each other long before their Star City training. That is why they were not afraid to compare their impressions after the episode ended. They received different "texts", but their initial reactions to the Whisper were identical: both became mute and dumbfounded.

According to cosmonaut X, the Whisper came from the depths of his consciousness. It said to him: "You arrived here too early, and you did it in the wrong fashion. Trust me, for I am your ancestor on the maternal side. Do you remember she told you, back when you were a child, about your great-grandfather who founded D.'s factory in the Urals? Sonny, you should not be here. Go back to Earth. Do not violate the laws of the Creator. Sonny, you must return, return, return." So, the Whisper told the cosmonaut a very private story about his mother and his great-grandfather, as if to prove his inside knowledge of the family.

Both cosmonauts were back on Earth two days later. The Whisper came back to them one more time. The "texts" of what it said were the same as the first time, and both felt the alien presence throughout their time in orbit.

Cosmonaut X and his comrade spent endless hours trying to determine what it was that they had experienced. They were atheists, and they both liked science fiction. This led them to conclude that alien intelligence, using some kind of hypnosis, is determined to prevent humans from exploring outer space. To convince humanity that its sons and daughters in outer space are not experiencing hallucinations, the alien intelligence presents hard facts picked up from probing human minds and subconscious memories. How long have "they" been researching our civilisation? Perhaps for thousands of years.

Were the aliens so naive that they couldn't understand that the cosmonauts would see through their ploy? Yet, if it was not an alien Whisper then whose was it? Did departed relatives really visit Soviet crews in space? This conclusion shattered the cosmonauts' convictions, their atheism and their view of the world. Did it mean that there is life after death and that consciousness (not the physical body) continues to exist in some other stages of existence? There must be a hierarchy to such stages, they mused, and on the top of the hierarchy would be the Creator, as the Whisper had informed cosmonaut X.

The cosmonauts faced a dilemma: to report the incidents or not. If they did, their careers could end immediately. They could be considered impressionable people, their psyches too unstable for further flights into space. Their sense of duty told both cosmonauts that they had to make a report, but they did not listen to that sense. Other cosmonauts kept somewhat silent about the Whisper; at least they reported nothing to their superiors. However, some cosmonauts who had heard the Whisper chose to make reports on their return from space. As a result, special medical teams were introduced into the training program, top-rated medical hypnotists began to explore cosmonauts' psyches, and the whole flight-training program underwent changes.

Cosmonaut X, who has since retired, does not know how the Whisper is treated nowadays and what conclusions Russian scientists have come to, but he did say that his whole outlook on life had changed. Outer space is full of intelligence and is much more complicated than we imagine it to be, he said. Our present knowledge does not allow us to understand the essence of most processes taking place in the universe. Our abilities are still quite limited. But for those who have heard the Whisper, one thing is clear: the future exists, and it is endless, just as time and space are endless.

Viktor Afanasyev's UFO Sighting

Soviet and Russian cosmonaut Colonel Viktor Afanasyev was featured in a 2003 British-made program aired on Russia's REN TV in 2004. The title of the program was *Zemlya pod pritsemom* NLO ("UFOs Target Earth"). As far as I can determine, the program included an interview by the US *Sightings* TV show (the video segment can be seen on YouTube at <http://tinyurl.com/lorch5w>). The date of the show is not known, but the presenter did note that "in the wake of *glasnost*, a Sightings investigative team was invited to Star City"—the "Russian equivalent of Cape Canaveral".

The journalists spoke first with Viktor Afanasyev, who told them that he had "just had an encounter with a UFO".

According to the translation for this *Sightings* segment, Afanasyev commented: "I think that we are not alone in the universe. I believe that someone or something of extraterrestrial origin has visited Earth."

The *Sightings* presenter then stated: "In April of 1979, cosmonaut Viktor Afanasyev lifted off from Star City to dock with the Soviet Salyut 6 space station, but while en route something strange happened. Cosmonaut Afanasyev saw an unidentified object turn toward his craft and begin tailing it through space." Afanasyev continued: "It followed us during half of our orbit. We observed it on the light side, and when we entered the shadow side it disappeared completely. It was an engineering structure made from some type of metal, approximately 40 metres long with inner hulls. The object was narrow [in one part] and wider [in another], and inside there were openings. [A drawing is presented on screen at this point.] Some places had projections like small wings. The object stayed very close to us. We photographed it, and our photos showed it to be 23 to 28 metres away," he said.

"In addition to photographing the UFO," said the *Sightings* presenter, "Afanasyev continually reported back to Mission Control about the craft's size, its shape and position. When the cosmonaut returned to Earth, he was debriefed, told never to reveal what he knew, and had his cameras and film confiscated. Those photos and his voice transmissions from space have never been released. It is only now, with the collapse of the Soviet Union, that Afanasyev feels he can safely tell his story," said the presenter.

"It is still classified as a UFO because we have yet to identify the object," Afanasyev stated, according to the translation. (Read more about his UFO and space experiences in the following sections.)

The other crew members did not come forth, as far as I'm aware.

This is a somewhat complicated story that needs clarification. A version of it was published on various western websites, mentioning the date of the Afanasyev sighting as April 1979. But that's impossible: at the time, Viktor Afanasyev was still a pilot in the Soviet Air Force.

Russian websites state that Afanasyev flew the Soyuz 30 spacecraft to Salyut 6. These statements are based on the REN TV program which included the 2003 British documentary and the *Sightings* segment. I could not find it to view; just some general references to it in Russian. In the *Sightings* video segment, cosmonaut Afanasyev does not state the date of the sighting or mention the name of the craft or the space station. I doubt that Viktor Afanasyev, a well-respected space explorer and scientist, would deceive his interviewers. In the *Sightings* segment, it's the presenter who says that Afanasyev's UFO sighting happened in April 1979 on approach to the Salyut 6 space station—again, an impossibility for Afanasyev at the time. Afanasyev's sighting could have been during the years 1990-1991, 1994 or 1999, but certainly not 1979.

Afanasyev logged 175 flight days during his first space flight (2 December 1990 to 26 May 1991) as commander of the Soviet Soyuz TM-11 spacecraft and Mir-8 mission, which included Japanese and British crew members. As far as I know, he and his crew members did not report any sightings in connection with this mission. However, if Afanasyev did have his sighting during this mission, it was likely to have been in early December (on arrival) or late May (on departure).

Afanasyev was also commander of the 8 January to 9 July 1994 Russian Soyuz TM-18 flight and Mir-15 mission. If he observed a UFO on this mission, it was likely to have been in January (on arrival) or July (on departure).

Viktor Afanasyev participated in a 188-day spaceflight from 20 February to 28 August 1999 aboard the Soyuz TM-29 transport vehicle and the Mir orbital station. Soyuz TM-29 docked with Mir on 22 February. Thus, if there was any sighting aboard Soyuz TM-29 (not Soyuz 30), it would have been in February (on arrival) or in August (on departure). In April 1999, Afanasyev was aboard the Mir space station.

Viktor Afanasyev attended the Akhtubinsk branch of the Moscow Aviation Institute between 1976 and 1980 to become an aircraft manufacturing engineer. From 1977 to 1988, he served as a test pilot and a senior test pilot at the state flight testing centre named after the famous Soviet pilot Valery Chkalov. Also, in the years 1985-1987, he was a Buran (Soviet space shuttle) test pilot; he was fortunate not to perish, as did most others associated with the doomed project (experienced Soviet test pilots were selected to train for manned missions using the Buran). In 1988, he became a test cosmonaut. In 1991, Afanasyev became the 70th Soviet cosmonaut to be awarded the title of Pilot-Cosmonaut of the USSR. Between 1990 and 1999, he spent approximately 555 days in space.

The Akhtubinsk UFO of 1985

In 1959, a town was created in the barren semi-desert steppes 292 kilometres north of the city of Astrakhan. Akhtubinsk is the name of this town which prides itself on being the home of Russia's largest state flight-testing centre (Gosudarstvenniy lyotno-ispitatel'nyy tsentr Ministerstva oborony imeni V. P. Chkalova, or the Valery Chkalov GLITs VVS).

In addition, to the north of the city there is the Groshevo (Vladimirovka) military testing range. In my years of researching Soviet UFOs, I have encountered a number of cases from that territory. Viktor Afanasyev is one of those who had a UFO experience while serving there.

In November 2005, Colonel (Ret.) Alexander Akimenkov was one of the speakers at the annual Russian UFO conference, Zigelevskiy Chteniya ("The Zigelev Readings"). UFO researcher Mikhail Gershtein's online magazine UFO Navigator posted a report on the conference in December 2005. Akimenkov, a former test pilot, presented a very detailed lecture about his UFO encounters during Soviet testing of new weapons in the Asian regions of the USSR. I've written about his experiences before, and hope to write more.

In the 1980s, Akimenkov was serving in Akhtubinsk. The retired colonel recalled that UFOs had visited the testing centre and range so frequently that pilots had the impression that aliens knew their flight schedules better than the Soviet military. He remembered a UFO-related incident when he and fellow test pilot Viktor Afanasyev were flying MiG-23 aircraft and testing new missiles. It was in January, most likely in 1985.

The command post raised a target to be shot down, and the pilots were ready to intercept. There was a glitch, and the target crashed to the ground. The pilots were quite concerned because they were beyond the testing range and the railroad. The snow-covered ground had a hole left by the crashed target. There was a tractor nearby but no people were around, and so the pilots calmed down. But then, the duty officer from the command post reported that there was an object over them at a height of about 600 metres. In the eastern part of the sky, they noticed a gigantic-sized Moon but they did not see any object. The duty officer was adamant that the object was there and that it was ascending. The pilots began ascending slowly to see what the object was, but they saw nothing. The object was reported to have departed in an easterly direction. Naturally Akimenkov and Afanasyev tried to catch up with it, but they did not have enough fuel and, most importantly, did not see what they were chasing. They stopped the pursuit and returned to the airfield.

The Scent of Space Not long ago, Viktor Afanasyev mentioned something very curious and fascinating: outer space has its own smell. He and his colleagues detected this incomparable star scent that permeated the space module. This scent is indestructible. Even back home when he retrieves items that were in orbit, he can smell the scent, but the spacesuits used for spacewalks smell differently. There is no Earth comparison to that scent, he said. It just smells like space. (The source is a 28 March 2013 article, "*Chem Pakhnet kosmos?*" ["What does space smell like?"], on the Russian-language Nasha Planeta ("Our Planet") website <http://planeta.moy.su>; or go to the web page at: <http://tinyurl.com/mlnu27y>.)

Who knows what awaits us as we explore outer space. We have not wandered far from the embrace of our planet, but we have already encountered wonders which, as yet, we are not able to explain.

About the Author:

Paul Stonehill is a researcher, author and lecturer specialising in anomalous phenomena, especially Soviet and Russian military research into the subject. He is the author of numerous articles for UFO-related magazines, as well as of several books including *Paranormal Mysteries of Eurasia* (Galde Press, USA, 2011), *UFO Case Files of Russia* (with Philip Mantle; 11th Dimension Publishing/Healings of Atlantis, UK, 2010; reviewed in NEXUS 17/05) and *The Soviet UFO Files: Paranormal Encounters Behind the Iron Curtain* (Quadrillion Publishing, UK, 1998). He has contributed nine articles to NEXUS, the most recent being "Revelations of the Cosmonauts", "Surprising Anomalies of China's Sichuan Province" and "The Enigma of the Nazi *Regenwurm*lager" (21/05, 21/04, 21/03).

Paul Stonehill is fluent in Russian and Ukrainian, and can be contacted via email at rurcla@hotmail.com.

Crop Circles 2014

A Mystery Here To Stay?

Predictions that crop circles would begin to vanish were not borne out in 2014, although the phenomenon gave Wiltshire, the usual hub of activity, a wide berth at first. As it turned out, another fascinating season of ingenuity ensued in the fields of England and beyond.

by Andy Thomas
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Email:
info@vitalsignspublishing.co.uk
Websites:
<http://www.truthagenda.org>
<http://www.vitalsignspublishing.co.uk>

New Trends in the UK Season

When the subject of crop circles is introduced into conversation, something that's often heard is: "You mean they're *still* appearing?"¹ Yet rumours of the death of the circle phenomenon have been greatly exaggerated, more to do with a misrepresentation from the mainstream media than with the reality. For all the smug "end-of-crop-circles"¹ falsehoods put about in 2013, this ever-baffling and spectacular mystery simply refused to go away in 2014.

Instead, the circles' UK heartland actually surpassed the previous year's numbers, if by a few (currently 52, compared with a final total of 42 in 2013), while at the time of writing the rest of the world was fast catching up with last year's total of 52, with 42 overseas reports by late August. Whether the designs themselves equalled the masterpieces of previous decades depends to some degree on personal taste, and some would argue that they didn't—but a number of remarkable patterns appeared nonetheless.

The English season opened encouragingly early, after a record late June start in 2013. If due to the much improved weather this year or a deeper factor, this time the first proper formation (after a scrappy triangular Wiltshire oddity at Wootton Rivers on 16 April) arrived on 30 April at Iwerne Minster in Dorset, a thin six-spoked wheel with internal circles in rapeseed (canola). This more significant event outside the usual Wiltshire catchment area began a trend for the season, whereby counties that had seen little activity for some time were conspicuously revisited. Perhaps this was the phenomenon making a statement against the now overwhelming hostility of the Wiltshire farming community, which led to many of this year's crop glyphs being either cut down immediately or firmly cordoned off. Aerial tourism became more attractive, as coach tours and field treks lost their currency.

This reaction was perhaps understandable from the point of view of farmers tired of fending off keen explorers. Many landowners or managers are now a more cynical second generation down from the ones who perhaps themselves were wide-eyed at the astonishing patterns on their territory when the big leap in complexity began in 1990. But the embargo was unfortunate for those for whom the experience of exploring formations continues to be meaningful. The defensive agricultural stance can even be counterproductive, as the more determined sometimes decide to prioritise higher aspirations and enter fields anyway, possibly without as much due care and attention as an officially opened one might invite.

These problems may have contributed to the feeling of a less-coherent "croppie" scene in Wiltshire this year, with opinion divided over how to respond and with the closure of the once ubiquitous Wiltshire Crop Circle Study Group (WCCSG), which held its last conference and ended its activities this summer. This was not because of a lack of crop circles but because websites are now the prime source of information, and perhaps, with less community cooperation, some of the advantages of the personal touch no longer carry the same weight. This seems a pity, but Francine Blake and the members of the WCCSG should be congratulated for having soldiered on for two solid decades, providing coherence and continuity for many seekers.



Harewell Lane, near Besford, Worcestershire, UK.
Reported 14 June. Image: www.MrGyro.co.uk



Bradbury Rings, near Wimborne Minster, Dorset, UK.
Reported 17 June. Image: www.LucyPringle.co.uk



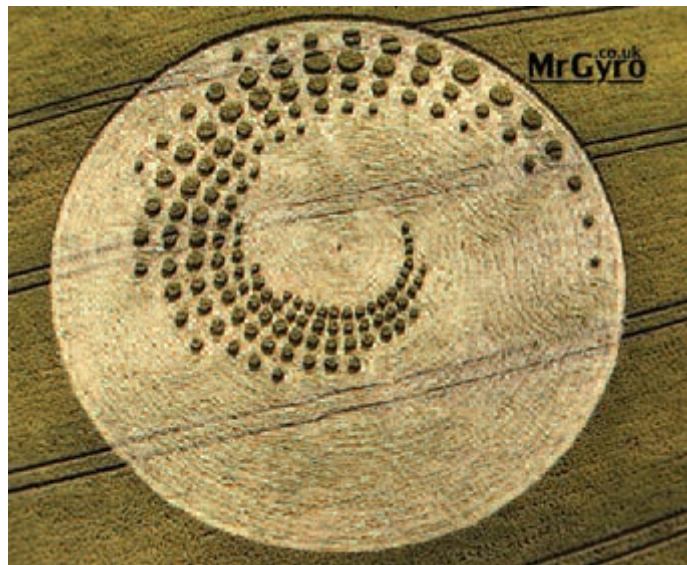
Ackling Dyke, near Sixpenny Handley, Dorset, UK.
Reported 29 June. Image: www.LucyPringle.co.uk



The Long Man of Wilmington, East Sussex, UK.
Reported 3 July. Image: www.CropCircleConnector.com



Tetbury Lane, near Charlton, Wiltshire, UK.
Reported 8 July. Image: www.MrGyro.co.uk



Forest Hill, near Marlborough, Wiltshire, UK.
Reported 16 July. Image: www.MrGyro.co.uk



Ackling Dyke, near Sixpenny Handley, Dorset, UK. Reported 22 August.
Image: www.LucyPringle.co.uk



Black Wood, near Popham, Hampshire, UK. Reported 21 June.
Image: www.CropCircleConnector.com

Fascinatingly, for all these apparent blocks, though, the circles themselves continued on, and it may be that their sheer determined tenacity, in defiance of pessimistic forecasts, may yet see them absorbed more fully into the cultural palette of the nation (as discussed later).

The circles' re-expansion to the provinces certainly helped reawaken interest more widely in other regions, such as East Sussex. This—my home county, and the crucible for much of my own early research—was finally revisited, after several fallow years, with a classic single barley circle at Falmer, near Brighton, on 30 May, and then with a far more intricate design near the famous Long Man of Wilmington hill carving on 3 July. This style, a precise nest of pentagons and rings radiating from a central star, had not been seen previously in Sussex and echoed the design of a 2013 formation near Stonehenge—again suggesting that the phenomenon may have been making a subtle protest about being hounded out to pastures new. Not that Wiltshire would be quiet for long; the circles would have their say there in the end. Curiously, the same cyclical curve of farmer response that took decades in Wiltshire occurred in just a week at Wilmington. The farmer was tolerant of visitors at first; but after a torrent of interest in the first event, he took no chances when a second formation, in a Celtic cross style, arrived there on 9 July, cutting it down within hours of its appearance.

Other counties to see renewed activity in 2014 included Worcestershire, which gave the year its first complex mandala (a new play on circles and rings) at Pebworth on 26 May before topping this with an impressively crisp star and pentagon at Besford on 14 June, recalling some of the late 1990s designs.

Dorset, meanwhile, produced some further fine patterns as the summer progressed: a thin dumbbell of elaborate

rings and squares at Hod Hill, near Hanford, on 1 June, was rendered almost as a draughtsman's technical diagram, while a bizarre design of a crescent, semicircles and mazes superseded this at Badbury Rings, near Wimborne Minster, on 17 June. This itself was trumped by an extraordinary burst of a pentagram, circles and crescents at Ackling Dyke, near Sixpenny Handley, on 29 June, perhaps one of the most visually striking events of the year. Nearby Gussage St Andrew then received an even more elaborate sequel on 13 August, this time utilising "sine wave" arms and rayed paths superimposed upon a complex star and hexagram.

Long before Wiltshire claimed the crown, pre-1990s it was often Hampshire that was the main focus for the circles, and 2014 saw a mini-revival here, too, starting with a very curious spiral of what looked like blocks of unusual "code" at Chilcomb Down on 6 June, followed up with a beautiful six-pointed star at Popham on 21 June, starkly effective in its simplicity. The at first simple-looking crescents motif that then arrived on 4 August at Tichborne rewarded further scrutiny of its central circle, which was cleverly textured with a different kind of six-pointed star embedded into its chequered "basket-weave" lay.

One of the major counties to reawaken with formations in 2014 was Essex. Earlier entries comprised a complex circular design with a hexagon and a triangle near Southend-on-Sea on 14 June, a notably long and advanced pictogram with circles and crescent at Roydon on 17 July, and a visually related follow-up at Rochford on 24 July, before a final surge in August.

Gloucestershire was also active in 2014, beginning with a rather cartoon-like 20-petalled flower at Rodmarton on 15 July. The county then saw the basket-weave style utilised at the centre of an odd but clear-cut pictogram at Barnsley on 22 July, before this technique was repeated in a single circle at Quenington on 26 July and yet again at Cherington on 27 July, this time embedding, as at Tichborne, an intricate star design in the lay of its central circle, surrounded by a large outer ring of latticed rectangles.

Other counties to report formations included Devon, Northamptonshire, Northumberland and, with one of the more significant glyphs, Warwickshire.



Gussage St Andrew, near Sixpenny Handley, Dorset, UK. Reported 13 August.
Image: www.LucyPringle.co.uk



Roundway Hill, near Devizes, Wiltshire, UK. Reported 30 July.
Image: www.LucyPringle.co.uk

All this national activity, together with the hostility of the Wiltshire farmers, might give the impression that Wiltshire itself, the general hub of key circular events in the modern era, was somehow empty of formations. Not so. In fact, after what did seem like a respectful hesitancy about operating there at first, the phenomenon then appears to have shrugged and got on with annoying the agricultural community and delighting aficionados as usual, even if gaining access remained an uphill battle.

The Wiltshire year began in earnest at the classic site of Alton Barnes on 20 June, with a pair of circles on either side of a straight line of "beads". Although basic, it was at least a heartening sign that all was not lost here. A 1980s-style multi-ringed circle echoed days of yore at West Kennet Long Barrow on 22 June, before a very-wide-ringed circle appeared nearby two days later. Two modest formations occurred in June, before Hackpen Hill then delivered a different design trend on 8 July in the form of a stylised "Moon face" and spiral contained within a ring of 16 petals, reminiscent of the Gloucestershire flower but seemingly random in size, as if in "naive art" style.

One of the best Wiltshire designs, clean-cut and pleasing, arrived at Charlton, near Malmesbury, on 8 July, an elaborate mix of triangles and rings. West Kennet Long Barrow was revisited by another 1980s-style ringed circle on 13 July, before the phenomenon delivered one of its most original formations yet, near Marlborough on 16 July. This very clever pattern suggested a digital nautilus shell of diminishing standing circles in a spiral, set against a flattened surface—showing that even after more than two decades of continuous ingenuity, the circle mystery can still surprise.

The Etchilhampton Hill area—one of the last bastions of a tolerant farmer—offered at least two chances for visiting cropies this summer, with a triangle-circle emblem on 27 July and a simple circle encompassed by a thin ring of huge diameter at nearby Mixon on 12 August. Other more notable Wiltshire offerings included a heavily textured ringed star at Green Street, near Avebury, on 8 August.

Dorset saw another interesting glyph, perhaps resembling symbolic fishbones, at Ackling Dyke again on 22 August, and Essex produced four more attractions, all at Stroud Green, in the forms of a classic rings-and-crescent on 24 August, a seven-spoked wheel of thin paths on 29 August, an encircled pentagon with a pentagram on 31 August, and a small pictogram on 3 September, the most recent event at the time of writing.

But it was Warwickshire that provided the kind of overall "stunner" that some observers felt had been missing this year. Near Ansty on 16 August, an ambitious design comprising a single "all-seeing eye" surrounded by paths and multiple diamonds was as impressive for its very elaborate lay as for its overall effect. Surrounding a tight central spiral into the "pupil", the "iris" had been created by crop laid radially *inwards* in a very complex and attractive weave. Other elements showed an impressive attention to detail. With conspiracy speculation currently rife, and

growing fears surrounding mass surveillance, mass deception and accelerating control agendas, the appearance of an all-seeing eye somehow seemed an appropriate, if unsettling, main "statement" for the season.



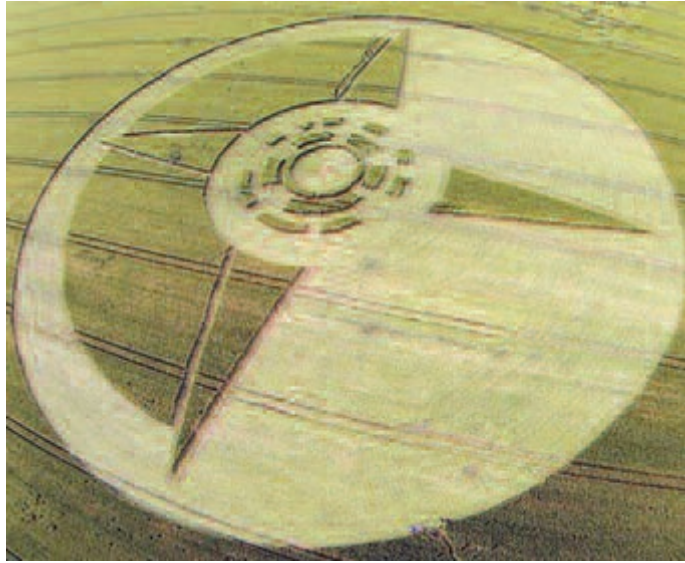
Ark Lane, near Stroud Green, Essex, UK. Reported 3 September.
Image: www.CropCircleConnector.com

Formations Beyond the UK

What about the rest of the world? For reasons still much debated, the main focus of attention clearly continues to rest on the United Kingdom, primarily England. But the UK does not stand alone. This is a global phenomenon.

The Netherlands saw the most action overseas, with reports coming in as early as 29 January, making the single grass circle at Hoeven the first formation of the year. By the end of the summer, at least 16 patterns of varying size, complexity and quality had been recorded. Controversy has been stirred over the Dutch activity, with many events seemingly centring around the resident psychic Robbert van den Broeke, attacked by sceptics but supported by US researchers such as Nancy Talbott of the BLT Research Team. Of the Dutch events, the complex cross with a central oval and intersecting horizontal path which appeared at Standdaarbuiten on 16 July, and the large ringed circle at Zevenbergen on the same night, stand out, although a series of formations in maize around the same time displayed notably intricate lays.

Italy was quieter than in some years but still produced one of the finest formations seen outside of England. The huge and breathtaking dumbbell pictogram at Marocchi, Poirino, on 21 June continued this region's trend of spectacular designs, employing multiple rings, "grapeshot", small triangles and elements of the compasslike segmented sections seen in its predecessors. A jagged four-bladed "saw wheel" at Pontecurone on 20 June also impressed, while a kind of "flower of life" at Marsciano on 17 May tapped into a European trend for this kind of emblem in 2014.



Boskovic, Czech Republic. Reported 28 June.
Image: J. Parma and L. Susil, www.boskobice.cz



Dornberg/zierenberg. Germany. Reported 1 August.
Image: Ulrike O'Nada Gomes Ascenso, tinyurl.com/pglfybh



Ammersee (Lake Ammer), Bavaria, Germany. Reported 18 July. Image: Markus Neubauer.

Other countries to receive "flowers of life" included **Germany**, which hosted a double-vision-style one at Dornberg, near Zierenberg, on 1 August (although some reports give 16 July), and **Sweden**, which produced a more conventional example at Lund, near Malmo, on 3 August.

Germany also received a breathtaking threefold mandala of intersecting rings and chequers at Ammersee, Bavaria, on 18 July, adjacent to a large radar dish. A trend of proximity to such devices has been noted before, particularly in England. Oddly, this Bavarian glyph was reported on BBC television as a notable event, while the plethora of the home country's formations was largely ignored by the broadcasters!

Other non-UK standout formations included two thematically related patterns in the **Czech Republic**, one a four-pointed star with just half of its encompassing circle flattened, at Boskovice on 28 June, and a similar but more "Pac-Man"-like motif at Privetice, near Rokycany, on 6 July. Meanwhile, two rather wobbly sacred-maze patterns arrived in Europe: one at Turija in Vojvodina, **Serbia**, on 8 June, and a slightly neater one at Celle, near Savigny-sur-Braye, **France**, on 12 June. France had a further formation in the shape of a double-ringer at Cessy, Ain, on 18 July. This year also saw **Poland** receive two of its largest crop formations yet, with a near identical duo of elaborate *vesica piscis* designs next to large circles, the first at Slawsko Lower on 29 June and the second at Orchowice on 11 July.

Additional countries to report circular arrivals included **Austria, Belgium, Slovakia** and **Slovenia**. Huge countries like the **USA** remained largely bereft, as is not unusual these days, apart from a triangular formation at Benicia, California, on 18 June. However, much fuss was made in January over a circuit-board-like pattern which turned out to have been made for advertising purposes (although some have claimed otherwise) in December 2013, complete with accompanying YouTube clips of weird lights flashing over the field at Salinas, California.

That the story of the apparent US hoax and the arrival of the Bavarian design received UK media coverage, while only one or two English formations did, demonstrates a slightly schizophrenic response from the same journalistic sources who last year were prematurely reporting the death of the circle phenomenon in the unquestioned centre of global activity.

Crop Circles and the Cultural Landscape

The doggedness of this admirably relentless mystery may yet win the day. An exhibition of circle photographs, courtesy of the Crop Circle Access Centre (not that there was much access this year), which ran at the Wiltshire Museum in Devizes throughout the summer, drew in a steady stream of visitors. Once presented with the facts and visual evidence of what is actually *still* going on, the public seems to have a renewed fascination—which suggests that the sheer persistence of the circles has permeated more deeply than we knew. This is somehow reassuring, and should perhaps be tapped into more often.

With all the arguments about their origins—esoteric or mundane—still unresolved and seemingly increasingly irrelevant to those who find stimulation in them regardless of their source, it is perhaps a surprise that crop circles haven't yet found their way into tourist promotions of England, alongside Beefeaters and London buses. But their time may yet come. It seems clear despite all the fears around its possible demise that the circle phenomenon is

going to be around for a while after all.

The world would unquestionably be a much duller place without this mystery. With dark agendas, international conflicts, new "cold wars" and social issues lapping at our heels at the moment, the fact that beauty and ingenuity are welling up around us, seemingly as an act of balance, offering inspiration and intellectual challenges, feels perfect. Why let cynics spoil the fun?

Crop circles are the very antithesis of hostility and mundanity. What more could we want to help offset these turbulent and grey times? Though farmers may disagree, it is time now, surely, to embrace crop circles more fully and allow them their rightful place in the wider cultural landscape at last. Certainly, it seems as if there will be more to say in 2015.

About the Author:

Andy Thomas is one of the world's leading mysteries researchers. He is the author of the acclaimed book *The Truth Agenda: Making Sense of Unexplained Mysteries, Global Cover-Ups & Visions for a New Era* (Vital Signs Publishing, 2009-2013; reviewed in 16/06, 19/04), which will soon be available as a US edition published by Adventures Unlimited Press. He is also the author of *Conspiracies: The Facts—The Theories— The Evidence* (Watkins Publishing, 2013; reviewed in 20/05). Andy Thomas has written five books on the crop circle phenomenon, including *Vital Signs* (1998; reviewed in 5/06, 9/06), considered by many to be the definitive guide. He lectures widely around the UK and the world, and has appeared on many TV and radio programs.

For more details, visit his websites:

- www.truthagenda.org
- www.vitalsignspublishing.co.uk
- www.glastonburysymposium.co.uk

Andy Thomas can be contacted at: info@vitalsignspublishing.co.uk



Giant Spiders: Monstrous Myth Or Terrifying Truth?

by Karl Shuker, PhD © July 2014

Monstrous spiders of gargantuan size are perennially popular subjects in science fiction "B" movies as well as in classic fantasy novels such as J. R. R. Tolkien's *The Lord of the Rings* trilogy and *The Hobbit*, but could such beasts exist in reality? The current record-holder for the title of world's largest spider is Rosi, a 12-year-old captive female specimen of South America's Goliathan bird-eating spider *Theraphosa blondi*. Rosi boasts a leg-span of 11.25 inches [~28.6 centimetres] (big enough to cover a dinner plate), a body weighing 6.17 ounces [~175 grams] (which is as heavy as six house sparrows [*Passer domesticus*]) and as big as a tennis ball, plus a total body length of 4.75 inches [~12 cm].

Although these are impressive statistics, they are far from monstrous. In contrast, as I reveal in this present ShukerNature blog article, there are some remarkable yet currently unresolved modern-day reports on file, hinting that certain truly astonishing arachnids whose size very dramatically surpasses this latter species' stature lurk in shadowy zoological anonymity within various regions of our world.

Huge Spiders in Papua New Guinea

The Kokoda Track (or Trail) is a single-file foot thoroughfare running 60 miles [~97 kilometres] through inhospitable terrain across the Owen Stanley Range of Papua New Guinea. From July 1942 to January 1943, it was the site of a series of World War II battles between Australian and Japanese forces, known as the Kokoda Track campaign. In 2001, Australian cryptozoologists Peter and Debbie Hynes revealed that it was also here that the father of one of Debbie's friends, while serving as a soldier in the Australian Army, had a brief but unforgettable encounter with a mystery mega-spider:

"One day he had to take himself off into the scrub in answer to a call of nature. While thus engaged, he noticed he was crouched down next to a very large cobweb—not the classic fishing net' sort but the fine, snow-white cottony stuff that spreads all over the ground and tree trunk, etc. His eye followed it one way and then the other; seems it was very extensive, like 10 to 15 feet [~3.05 to 4.6 metres] either way. Then he noticed the spider itself, only a foot [~30.5 cm] or so away from his face. It was a real horror: the body, i.e., thorax + abdomen, he described as the size of a small dog or puppy'; it was coloured jet black, the legs were thick and hairy but not as long as the classic dinner plate tarantula-type spider that owes its size to the spread of its legs. This thing had more body bulk than spread. Needless to say, he backed out of there *very* slowly and carefully.¹

In spiders, the "body" is actually just the abdomen (opisthosoma), not the thorax plus abdomen (although it can look like that to laymen unfamiliar with spider anatomy) because the thorax section is combined with the head, yielding the prosoma or cephalothorax. So, judging from the above description, the "puppy spider" must have been at least the size of an adult chihuahua!

This is not the only report of a giant mystery spider encountered in New Guinea during World War II. During an interview with cryptozoologist Rob Morphy of AmericanMonsters.com on the US radio show *Coast to Coast AM* a couple of years ago, a telephone caller named Craig recounted how his grandfather, while serving in New Guinea during World War II, encountered a monstrous spider in a web that scared him so much that he hacked it to death with his machete. According to Craig's grandfather, the spider measured an immense three feet [~0.914 metre] from tip to tip and, unexpectedly, was not hairy like many big spiders are. Instead, it was shiny and emerald green in colour. This nightmarish arachnid was encountered near Port Moresby, the capital of Papua New Guinea.

J'Ba Fofi: Great Spider of the Congo

Yet even this monster pales into insignificance alongside the horrifying *j'ba fofi* ("great spider"), said by the Baka pygmy tribe and also the local Bantu hunters to exist amid the Central African jungles of Cameroon and the Democratic Republic of the Congo (formerly the Belgian Congo). This eight-legged terror was first brought to my

attention in 2001, when cryptozoological explorer Bill Gibbons told me of a very frightening close encounter that had occurred one day back in 1938.



The author with a model of a giant spider
Image: © Dr Karl Shuker

This was when explorers Reginald and Margurite Lloyd were driving along a jungle path in the Belgian Congo's interior. Suddenly, a figure stepped out onto the path just ahead of them, resembling a monkey or a small, stooped human.

Reginald Lloyd stopped the car to let the figure pass, and was astonished to see that it was a huge brown tarantula-like spider, with a leg-span of three to four feet [~ 0.914 to ~ 1.22 metres]! As he turned to grab his camera, however, the giant spider scuttled into the undergrowth and disappeared.

In November 2003, during an expedition to Cameroon seeking a mysterious long-necked water beast called the *mokele-mbembe*, Gibbons mentioned to the Baka pygmies the Lloyds' sighting (originally recounted to him by their daughter, Margaret).

They were familiar with such creatures and provided him with additional information.

The Baka claimed that these colossal spiders were once quite common in this area but are rarer now (due to modern deforestation here?), although one was reputedly sighted by them as recently as June 2003.

The spiders construct hut-like lairs from leaves near the pygmies' villages, and by spinning mighty webs between adjacent trees, with trip lines running across game trails, they ensnare victims as sizeable as *duiker* (small antelopes) and devour them. Moreover, they were said by the Baka to be powerful and venomous enough to kill humans, too, but were themselves killed by the pygmies if encountered by them. The *j'ba fofi* supposedly lays white peanut-sized eggs from which yellow spiderlings with purple opisthosomas emerge, turning brown as they mature.

South American Mega-Spiders

Reports of comparably massive spiders have also been recorded from the rainforests of Venezuela in South America.

In 2008, the American television series *MonsterQuest* sent tarantula expert Rick C. West to investigate such stories in the field via a short, filmed expedition to some Venezuelan jungle villages near the Orinoco River and the border with Colombia. During his three-day foray, he was accompanied by a team of local helpers and an experienced Amazon guide, Juan Carlos Ramirez, who has worked here for over 20 years.

West began his quest by visiting the village of San Rafael de Manuare. Here, one villager attested that as a child he

had seen a giant tarantulalike spider capture a small dog from the village and drag it off into the jungle. Its opisthosoma was as big as a basketball, and when it reared up it was the size of a human.

If such a gigantic spider existed and its fangs (chelicerae) were in proportion to the rest of its body, these would probably measure six to nine inches [~ 15.24 to 22.9 cm] long. Although such claims would incite considerable scientific scepticism, Ramirez was convinced of the villagers' veracity, stating that they know the local fauna very well and would not mistake something familiar, such as a monkey or a sloth on the ground, for a giant spider.

West and his team also visited Pandari, a village deeper in the mountains. Here, two inhabitants, Antonio and his son Simoni, spoke of a small child who had disappeared, never to return, his vanishing blamed on a giant spider.

In addition, so real is the Pandari villagers' fear of such creatures that they even engineer their huts specifically to keep them out, building thatched roofs that extend all the way down to the ground, thus yielding dense, tightly interwoven barricades.

On the third day of West's expedition, they headed back into the jungle and found an extremely large spider lair in the ground, inside which they placed a videoscope. This revealed the presence there of a very big tarantula, which they captured alive. Although nothing like as sizeable as the reputed chicken-killing, dog-devouring, child-abducting specimens feared by the villagers, it was roughly the same size as the biggest tarantulas on record and was two ounces [~ 57 grams] when weighed inside a plastic specimen bag.



Australian Huntsman spiders belong to the Sparassidae family and have a leg span of 15 centimetres.
Image: M. Gray © Australian Museum

Sadly, West's expedition ended without finding conclusive evidence for Venezuela's fabled giant spiders. However, West was sufficiently impressed by the size of their captured spider to consider it possible that bigger ones did exist in the jungle, and stated that he planned on returning to continue the search for one.

In 2011, British cinematographer Richard Terry sought horse-killing, child-abducting giant spiders in Colombia's rainforest for the television series *Man v. Monster*.

He didn't find any, either, but villagers claimed that these dreaded beasts inhabited subterranean lairs opening onto the forest floor via huge holes.

Monster Spiders in Vietnam

On 8 April 2013, American cryptozoologist Craig Woolheater posted on the Cryptomundo website a fascinating communication that he'd received from an American correspondent publicly identified only by their Cryptomundo user name, "mrm maxima".

This person stated that their father-in-law claims that while serving in the jungles of Vietnam during the Vietnam War as part of a five-man unit conducting scout work there, he encountered spiders with bodies the size of dinner plates and, with their legs, yielding a total span of 20 to 30 inches [50.8 to 76.2 cm]. These terrifying arachnids were always spied near creeks or other water sources, and were so tough that even after being shot by him and the other men with their M16s, unloading full magazines, they were still moving around.

Giant Spiders in Suburbia

One of the most startling giant spider reports comes from Leesville in Louisiana, USA. According to William Slaydon, it was here that he, his wife and their three young grandsons, while walking northwards along Highway 171 to church one cool night in 1948, spied a gigantic spider—hairy, black and memorably described as "the size of a washtub". It emerged from a ditch just ahead of them and crossed the road before disappearing into some brush on the other side. Not surprisingly, the family never again walked along that particular route to church at night!

Nor is that the only report of a giant spider in suburbia. On 11 February 2013, Adam Bird from Nottingham, England, shared the following remarkable, never-before-publicised account on Facebook. It was related to him by a local librarian, Sheila, who had encountered the spider in question about 12 years earlier.

One evening, Sheila was driving along Nottingham's Stone Bridge Road, on one side of which was a farm (still there today) and on the other side a disused factory (now demolished). As she approached the factory, her car's headlights lit up what she thought at first was a hedgehog crawling towards the factory site. As she drove nearer, however, she realised to her horror that it was a huge, hairy, tarantula-like spider. Sheila estimated that its body alone was the size of a large dinner plate; when she added the length of its legs, she deemed its total width to be about two feet [~ 0.61 metre]. She continued to watch as it scuttled across the road and through the fence into the factory, then she quickly drove away. The memory of this spine-chilling encounter has remained with her ever since.

Physiological Size Limitations

So, could immense spiders truly exist? Other than Leesville and Nottingham, the areas where they have been reported are all sufficiently impenetrable, inhospitable and little explored to be potentially capable of hiding some notable zoological surprises. However, the fundamental problem when considering giant spiders is not one of zoogeography but, rather, one of physiology.

Their tracheal respiratory system (consisting of a network of minute tubes carrying oxygen to every cell in the body) prevents insects from attaining huge sizes in the modern world. The tracheae could not transport oxygen efficiently enough inside insects of giant stature. During the Late Carboniferous and Early Permian periods, 300 million years ago, huge dragonflies existed, but back in those primeval ages the atmosphere's oxygen level was far greater than it is today, thereby compensating for the tracheal system's inefficiency.

Moreover, until quite recently, prehistory offered a truly spectacular, fully confirmed super-spider, too: the aptly dubbed *Megarachne servinei*, formally described in 1980 from a 300-million-year-old Upper Carboniferous fossil specimen discovered by Argentinian palaeontologist Mario Hunicken in the Bajo de Veliz Formation at San Luis, Argentina. Its body measures roughly 16 inches [~ 40.6 cm] in length, with an estimated leg-span of some 20 inches [50.8 cm]. In 2005, conversely, the identity of *Megarachne* as a megaspider was challenged in a paper in the Royal Society's *Biology Letters* by Manchester University zoologist Dr Paul Selden and Hunicken, who proposed that it had actually been a very different chelicerate creature—not a spider but, rather, a sea scorpion or eurypterid.

This identity has since been confirmed—so, exit *Megarachne* as a giant spider!

Some of the modern world's largest known spiders utilise a tracheal respiratory system, whereas smaller spiders employ flattened organs of passive respiration called "book lungs". Yet, neither system is sufficiently competent to enable spiders to attain enormous sizes, based upon current knowledge at least.

So if a giant spider does thrive in some secluded far-off realm, it must have evolved a radically different, much more advanced, respiratory system, not just a greatly enlarged body.

(Source: This article is edited from Dr Karl Shuker's blog dated 30 July 2014, <http://karlshuker.blogspot.co.uk>, web page <http://tinyurl.com/pmdgkg8>.)

Author's Note:

This ShukerNature blog article is excerpted from an exceedingly extensive chapter on giant mystery spiders—the most comprehensive coverage of such cryptids ever compiled and published—in my book *Mirabilis: A Carnival of Cryptozoology and Unnatural History* (Anomalist Books, New York, 2013), which contains several additional examples.

About the Author:

Zoologist, media consultant and science writer Karl Shuker, PhD, is one of the best-known cryptozoologists in the world. He is the editor of *The Journal of Cryptozoology*, founded in 2012. He is the author of numerous books including *Mystery Cats of the World* (1989), *The Lost Ark: New and Rediscovered Animals of the 20th Century* (1993; greatly expanded in 2012 as *The Encyclopaedia of New and Rediscovered Animals*), *In Search of Prehistoric Survivors* (1995), and, more recently, *Extraordinary Animals Revisited* (2007), *Dr Shuker's Casebook* (2008), *Karl Shuker's Alien Zoo: From the Pages of Fortean Times* (2010), *Cats of Magic, Mythology and Mystery* (2012) and *Mirabilis: A Carnival of Cryptozoology and Unnatural History* (2013). His ShukerNature blog is at <http://>

www.karlshuker.blogspot.com. Dr Shuker's official website is <http://www.karlshuker.com>

BOOKS

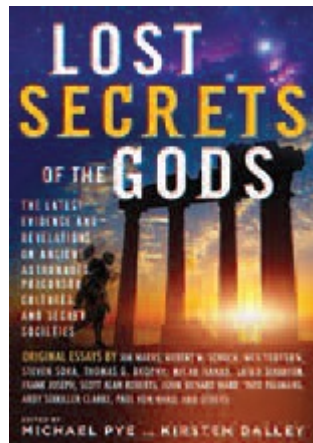
Reviewed by Ruth Parnell

The Complete Earth Chronicles:
Collector's Edition
by Zecharia Sitchin
Bear & Company, VT, USA, 2014
ISBN 978-1-59143-201-2
(7-volume boxed set, 2448pp hc)
Available: BearandCompanyBooks.com

Readers of the works of ancient Near East scholar Zecharia Sitchin (1920-2010) will welcome the release of a handsome boxed set of his famous, if not controversial, seven-volume *Earth Chronicles* series, written between 1976 and 1991. Reissued as large-format hard-cover editions with enhanced maps, diagrams and photographs, these titles are: *The 12th Planet*; *The Stairway to Heaven*; *The Wars of Gods and Men*; *The Lost Realms*; *When Time Began*; *The Cosmic Code*; and *The End of Days*.

Sitchin was the first to popularise evidence for the extraterrestrial Anunnaki visitors, based on his interpretation of ancient Sumerian and Akkadian cuneiform clay tablets. His legacy lives on and continues to inspire researchers into ancient civilisations and human origins.

Anyone whose Sitchin paperbacks are suffering the ravages of the years will appreciate this new Collector's Edition, as will those who've only read Sitchin's more recent works.



Lost Secrets Of The Gods
edited by Michael Pye and Kirsten Dalley
New Page Books, NJ, USA, 2014
ISBN 978-1-60163-324-8 (249pp pb)
Available: www.NewPageBooks.com

From Michael Pye and Kirsten Dalley, the editors who brought us *Exposed, Uncovered, Declassified* (see 19/03), comes another anthology of essays from some of today's leading researchers into ancient mysteries, advanced knowledge and secret societies. In their dedication, the editors acknowledge mysteries researcher Philip Coppens "who left us too soon" so suddenly in late 2012.

Starting off is Dr Robert Schoch on Gobekli Tepe, in today's Turkey, as the headquarters of a secret society at least 12,000 years ago. Frank Joseph reviews Plato's Atlantis according to a 13th-century BC timeline, and Steve Sora revisits Homer's epics and reveals the real location of Troy. Nick Redfern speculates on hairy man-beasts as ancient guardians of sacred locales in the English countryside, and Micah Hanks explores giants in Native American myth and folklore.

Paul Von Ward proposes his advanced being intervention theory (AB-IT), and Dr Ardy Sixkiller Clarke examines indigenous peoples' perspectives on ancient astronauts. Laird Scranton tunes in to ancient symbol and word correlations as keys to our true origins, and Dr Thomas Brophy highlights astroceremonial architecture. John Ward and Scott Roberts investigate the mysterious disappearance of 50,000 Persian soldiers in Egypt c. 525 BC. The anthology closes with Jim Marrs's take on the ancient alien "gods", the rise of supernatural religion, and the power of royal and financial elites over the hapless masses.

These contributors, well chosen by the editors, present a broad range of interlinked subjects to expand our understanding of human history.

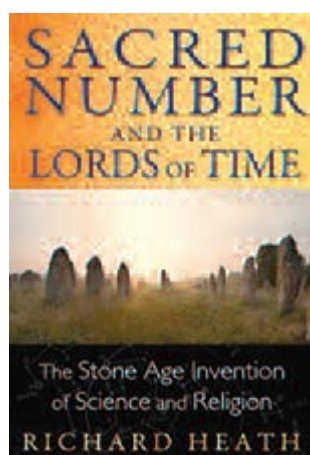
The Ancient Paths
by Graham Robb
Picador/Macmillan, London, 2013
ISBN 978-0-330-53150-4 (396pp hb)
Available: www.picador.com

For *The Ancient Paths*, historian Graham Robb went on a quest to explore the Heraklean Way, the fabled route that the hero Hercules took from the "Sacred Promontory" at the southwestern tip of the Iberian Peninsula to the Alpine pass of Matrona—the same pass which Hannibal used on his incursion into Italy c. 218 BC. Robb discerned that this diagonal line represented the angle of the rising Sun at the summer solstice and that it was intrinsic to the world of the Celts. He also discovered that dotted along this solstice line were places called Mediolanum, sacred sites of a Middle Earth with correspondences to upper and lower worlds in Celtic mythology.

Going beyond mere lines on a map, Robb has pieced together a history of the Celtic tribes who populated Gaul and greater Europe from c. 800 BC and later the British Isles, his coverage ending c. 600 AD. During the third and second centuries BC, Druid-divined Celtic migrations led to Rome, to Bohemia and ultimately to Delphi—locations which happened to coincide with the solstice lines.

Yet the maps tell a grand tale, delineating meridians identifying the centre of Gaul and connecting a solar network that included forts and *nemotons* or sanctuaries throughout Europe. Following the Romans' Gallic War and the tribal rebellions around the mid-50s BC, the Gaulish Druids moved to Britain where they established new solstice lines to account for the higher longitude and the different path of the rising Sun.

Robb brings to life a little-known but fascinating period of history.



Sacred Number And The Lords Of Time
by Richard Heath
Inner Traditions, VT, USA, 2014
ISBN 978-1-62055-244-5 (278pp tpb)
Available: www.InnerTraditions.com

It may be no accident that the units of measurement of the megalithic era have a fractional relationship to the Earth's dimensions, ponders systems scientist Richard Heath in his new book (see reviews of *Sacred Number and the Origins of Civilization* in 14/03 and *Matrix of Creation* in 12/01).

The English foot was defined through division of the equator's circumference by the number of days in a solar year

and the 360 degrees of a circle. However, in the fifth millennium BC, it was at Carnac in Brittany, France, with its special latitude, that these relationships were able to be coded into megalithic monuments and their alignments.

Heath identifies four megalithic ages, each of which featured similar metrological units and knowledge of the 3-4-5 triangle and the π ratio.

The teachings, evolving with each age, spread from Carnac to Britain, to Egypt, the Middle East and Greece (where metrology was combined with religious ideas), and then to Mexico.

From multiple-squares geometry and the henge as an Earth model, to the Ark of the Covenant's dimensions and the planet Saturn's connection with the Earth's polar axis, Heath reveals the underpinnings of our civilisation and seeks to revive the sacred teachings preserved in stone.

Ancient Aliens On Mars II

by Mike Bara

Adventures Unlimited Press, USA, 2014

ISBN 978-1-939149-31-2 (233pp tpb)

Available: www.nexusmagazine.com

www.AdventuresUnlimitedPress.com

True to his promise, Mike Bara has followed up quickly with the sequel to his book *Ancient Aliens on Mars* (see 21/02). He stands by his perspective on an ancient alien presence on Mars that was wiped out by a cataclysm. He also continues to expose the scientists from NASA, the Jet Propulsion Laboratory and Arizona State University who have released images with doctored data.

Bara revisits the debacles of 2002-2003 with the publication of the "official" thermal infrared images from the THEMIS instrument on board the 2001 Mars Odyssey craft, and the work of image analyst Keith Laney which revealed buried ruined cities in the Cydonia region. He again examines data from the Mars Reconnaissance Orbiter and Mars rover missions, but highlights photos taken in 2006 by the European Space Agency's Mars Express which show these anomalies in higher resolution.

As well as going into more detail about the Face and various artificial structures in Cydonia, Bara presents images from other regions showing tetrahedral pyramids, huge tunnels, temples, bridges, animal-shaped geoglyphs, an "air guitar" bipedal cat, tall trees and green mosses, human skull-like artefacts, and metallic or mechanical parts scattered about.

The question that Bara asks is: why is the truth being kept from us?



Haunted Skies: Volume Eight - 1980

by John Hanson & Dawn Holloway with Brenda Butler

Haunted Skies Publishing, UK, 2013

ISBN 978-0-9574944-1-1 (541pp l/f pb)

Available: Amazon.co.uk

www.Amazon.com

Former West Midlands police officer John Hanson and his partner Dawn Holloway have spent more than 15 years

on their *Haunted Skies* project, documenting the modern history of British UFO events. Volumes One to Seven cover 1940-1979. Volume Eight, reviewed here, focuses on 1980—a year of some pivotal moments in ufology, such as the birth of the crop circle phenomenon, and the mysterious UFO/ET incidents in Rendlesham Forest, near RAF Woodbridge and Bentwaters in Suffolk, which marked British ufology's coming of age according to researcher and author Philip Mantle in the foreword. In fact, they devote more than half of this volume to the Rendlesham events, assisted by researcher Brenda Butler who was one of the initial three civilian investigators and still has unusual sightings in the forest to this day.

Hanson and Holloway cover events month by month and follow up on reports made to the police and Ministry of Defence, local papers and UFO groups, researchers and magazines. For a book centred on only one year, and with most reports just from England, the variety of sightings is astounding: lights of every colour, craft of every shape and many strange beings. The assorted eyewitness accounts, maps, photos, illustrations, press clippings and documents make this volume a feast for the eyes and mind. (Volume Nine, 1981-86, is also now available.)

Reversing Heart Disease, High Blood Pressure And Blocked Arteries Without Drugs

by Peter Dingle, PhD

Barker Deane Pub., Australia, 2014

ISBN 978-0-9925143-0-3 (274pp tpb)

Available: barkerdeanepublishing.com.au

Cardiovascular disease (CVD) was not a problem for our forebears, and yet today it's the leading cause of death in industrialised countries. What's happened in the meantime? Our increasing consumption of denatured, processed foods has something to do with this alarming situation. Here, medical researcher and health educator Dr Peter Dingle explains the basics of CVD including heart disease, high blood pressure, blocked arteries and stroke. He restates the cholesterol deception that he's written about before, and says that drug treatments offered by a corrupt pharmaceutical system are not the solution, and nor is surgery.

Dr Dingle cites the latest scientific literature, but also reports anecdotal evidence from people who have adopted "DEAL" (diet, environment, attitude, lifestyle) strategies and reversed their ill health. He advocates a simple, whole food-based diet with plenty of vegetables, fruits and nuts, adequate fibre and protein, and good oils. He also gives advice on dealing with stress and changing our attitude so that we may lead healthier, happier lives. In addition, he urges doctors to take on board his advice about reversing CVD.



An Electronic Silent Spring

by Katie Singer

Portal Books/Steiner Books, USA, 2014

ISBN 978-1-938685-08-8 (270pp pb)

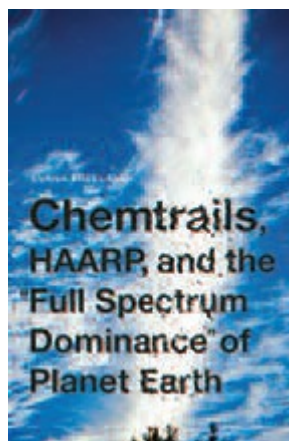
Available: www.steinerbooks.org

What would *Silent Spring* author Rachel Carson have said about the sea of electromagnetic radiation (EMR) that's swamping us today? She'd be warning about the dangers of exposure, just as she did with toxic chemicals. Medical journalist/author Katie Singer, who works with the Electromagnetic Radiation Policy Institute in the USA, has taken up Carson's baton to warn us about EMR's adverse effects on humans, animals and the environment.

In her comprehensive book *An Electronic Silent Spring*, Singer explains the basics on electricity, magnetism and electromagnetism. She includes contributions from scientists, engineers, medical doctors, lawyers and laypeople,

reports on significant scientific peer-reviewed studies, and extensive resources. She details the vast array of illnesses experienced by people exposed to Wi-Fi, smart phones, cellphone towers, smart meters and more: fatigue, anxiety, headaches, electrohypersensitivity, rashes, addictive behaviour, irregular heartbeat, cancers, diabetes, infertility, inflammation, tinnitus, memory loss and possibly even autism and Alzheimer's disease. The stories from people experiencing ill effects are very disturbing.

While alerting us to the dangers, Singer poses solutions to help individuals, society, legislators, regulators, manufacturers, utilities, telcos, healthcare providers, schools, environmental organisations and community groups respond to this all-pervasive threat to our health. She encourages us to become educated and take political action.



Chemtrails, Haarp, And The Full Spectrum Dominance Of Planet Earth
by Elana Freeland
Feral House, WA, USA, 2014
ISBN 978-1-936239-93-1 (272pp tpb)
Available: www.feralhouse.com

The US military-industrial complex is on its way to achieving "full-spectrum dominance" of the planet, and its use of HAARP ionospheric heating technology with ionised/ electrified chemtrails amounts to a global-scale directed-energy weapon (DEW) system. This is the conclusion of researcher Elana Freeland, who was commissioned by publisher Feral House to write this book (see her article on DEW in this issue).

But there's more. We have to consider what's happening with the engineering of our climate, food and environment, the disaster capitalists' enrichment schemes, and the poisons raining down on us from chemtrails: nanosized endocrine-disrupting chemicals, biological and metallic agents, and genetically altered filaments linked to the shocking fibre infestations of Morgellons disease.

Freeland tracks the development of the national security state where the promised "Revolution in Military Affairs" now applies as much to high-tech weapons as technologies that record our conversations and emails and disrupt our brain frequencies. In deconstructing Bernard Eastlund's 1987 HAARP patent, Freeland (with help from scientist Clifford Carnicom) reveals how the technology's "electron cyclotron resonance" can target potassium ions and cause biological interference in large swaths of populations. Freeland urges us to become informed and to "take up this fight for humanity" if we want to maintain our biological integrity.

Close Encounters Of The Fatal Kind
by Nick Redfern
New Page Books, NJ, USA, 2014
ISBN 978-1-60163-311-8 (221pp tpb)
Available: www.NewPageBooks.com

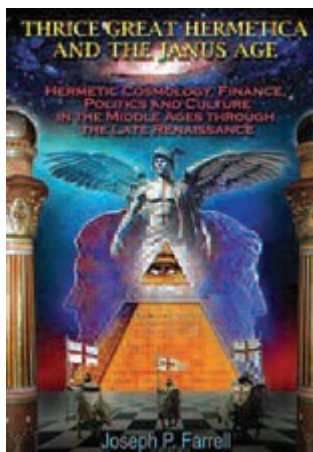
It's extraordinary the number of people who have died in unusual circumstances relating to UFOs. Nick Redfern (21/02, 20/06, 20/01) brings to the fore a wealth of research based on declassified files, eyewitness testimony and his own interviews. In these pages there are cases of downed aircraft, crashed or vanished pilots, murders dressed up as suicides, Men in Black encounters and mind-control operations.

Redfern documents untimely deaths by defenestration (US Secretary of Defense James Forrestal in 1949, and US Army/CIA MKULTRA chemist Frank Olson in 1953) and by suspected induced heart attack or poisoning (remote

viewer Pat Price in 1975). He reports on the many scientists associated with electronics corporation Marconi's classified projects who met their ends in suspicious incidents including car accidents in the 1970s-90s. He also looks into the deaths of investigators like journalist Danny Casolaro, murdered in 1991 while messing with the tentacles of "the Octopus" and their spread into dark UFO territory.

As for missing pilots, Redfern relates the strange tale of Frederick Valentich, who disappeared in 1978 along with his Cessna 182 en route to King Island off Tasmania. His last words to air traffic control were: "It is hovering and it's not an aircraft."

These are just a few of the many unexplained cases which Redfern examines in his unsettling book.



Thrice Great Hermetica And The Janus Age
by Joseph P. Farrell
Adventures Unlimited Press, USA, 2014
ISBN 978-1-939149-33-6 (342pp tpb)
Available: www.nexusmagazine.com
www.AdventuresUnlimitedPress.com

If not for the Knights Templar, the Middle Ages might have lasted a great deal longer. Indeed, to understand how the Middle Ages blossomed into the Renaissance and then the Enlightenment, it is necessary to explore the history and connections of the Knights, "the first recognizable international military-industrial-intelligence-finance complex", says historian Joseph Farrell in his latest monumental work (also see 21/02, 20/03, 19/02). The core of nine Templars, even before the order was officially founded in 1125, were in Jerusalem in 1118 but they weren't protecting pilgrims: they were excavating the Temple Mount for a secret treasure, perhaps the Ark of the Covenant and ancient scrolls pointing to more secrets.

Farrell joins dots which other historians haven't dared to, linking the Templars with the Venetians, the sacking of Constantinople in the Fourth Crusade, and ocean travel to the New World. With the demise of the Templars, in 1310 the Venetian Council of Ten was set up and continued the intelligence and banking systems in cooperative competition with the Genoa city-state and the Knights Hospitaller.

The Templars tapped into an ancient Egyptian hermetic legacy which led to the Renaissance a century later. The magical, alchemical and kabbalistic teachings were transferred to the arts and sciences, and into Elizabethan-era plays and theatre design in which the microcosm reflected the cosmos.

Farrell calls the Middle Ages to the Enlightenment the "Janus Age"— looking back into classical antiquity and forward to an enlightened future. An engrossing, far-ranging read.

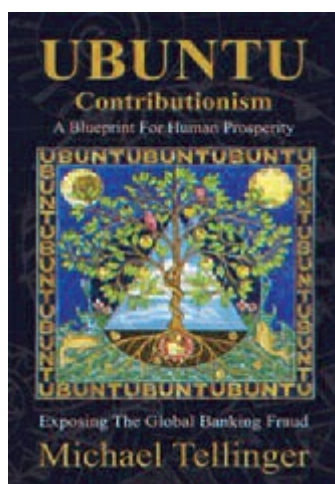
Judas Of Nazareth
by Daniel T. Unterbrink
Bear & Company, VT, USA, 2014
ISBN 978-1-59143-182-4 (373pp tpb)
Available: BearandCompanyBooks.com

In his search for the historical Jesus, Daniel Unterbrink discovered that no evidence exists. However, he did uncover an historical Judas of Galilee who was a Jewish freedom-fighter and upholder of the Law, and who was likely to

have lived c. 25 BC to 19 CE. However, by the middle of the first century CE, this revolutionary figure was morphed by Paul, formerly Saul, into a divine-human Christ model for his faith-based Christ Movement.

To prove his point, Unterbrink deconstructs primary sources such as Josephus, Tacitus, Suetonius and Pliny the Younger as well as the Dead Sea Scrolls. The gospels and Acts he regards as secondary sources. He suggests that while the life of Judas of Galilee is documented by Josephus (whom some believe was actually Paul), any mentions of Jesus were likely added by later writers.

The real Jewish Messiah, Judas the Galilean, who had a vision for a coming Kingdom of God, wasn't as marketable to the new Gentile Christians as Paul's "new and improved version". Furthermore, Unterbrink contends that the gospels are works of historical fiction written in the late first century in the light of Paul's new "Jesus" religion. His eye-opening analysis shakes the very foundations of Christian beliefs.



Ubuntu Contributions
by Michael Tellinger
Zulu Planet, South Africa, 2013
ISBN 978-1-920153-09-0 (350pp tpb)
Available: www.michaeltellinger.com

Most of humanity is enslaved by the royalty-banking elite, a state of affairs that can be traced back to ancient Sumer when the "gods" appointed priest-kings to keep the human race under control, according to South African researcher and scientist Michael Tellinger (see 20/03, 17/04). Fortunately, human consciousness is evolving despite the controllers' best plans, and Tellinger sees a way to change our world for the better. He's developed a blueprint for prosperity based on the ancient African Ubuntu philosophy of sharing and unity. It's also a social structure that does away with money, trade and barter, and allows individuals and communities to cooperate for a common purpose of abundance, allowing the full expression of creativity.

Tellinger spells out his vision for Ubuntu Contributionism, showing how it can be applied to a range of endeavours including agriculture, energy, mining, manufacturing, forestry, health, transport, finance, communications and more. It's all about living in harmony with Planet Earth and our fellow humans—a big call considering the darker side of human nature. He also gives answers to frequently asked questions about the practicalities of this system which he's launched as a global liberation movement and a political party in his homeland. It's time to restore our rights as free human beings, Tellinger asserts.

Threats To Our Wealth
by Karen Mutton
Lulu Press, USA, 2014
ISBN 978-1-312-28943-7 (160pp pb)
Available: www.lulu.com
www.karen-mutton.com

With so much uncertainty over the global financial system, we need to be prepared for the possibility of economic collapse and how it may affect our savings and livelihoods.

In her new book *Threats to Our Wealth*, independent researcher Karen Mutton explains how we've come to have a

debt-based monetary system and why it's become corrupt and unsustainable. She reviews and updates subjects she's written about in NEXUS: the Cyprus template that puts our bank deposits at risk; pension confiscations, bank bail-ins and levies; and an anticipated global currency reset (see 20/05, 21/02, 21/03). Other threats which she addresses include deflation and hyperinflation, looming meltdowns with derivatives and bonds, cyber attacks, controls on capital and confiscation of dormant accounts.

Her up-to-date coverage is extensive, examining statistics, commentary, policies and legislation relating to Australia and New Zealand, China, Russia, Europe, the UK and the USA.

Mutton points to some positive trends which give hope that financial system corruption and manipulation will be reined in. She also has advice on taking control of your finances, paying off debt, keeping your bank account lower than your country's deposit guarantee, and developing practical skills for surviving and even thriving in a post-collapse world. Mutton demystifies complex subjects and helps us navigate the rocky road ahead with a more equitable economic system in our sights.

DVDs

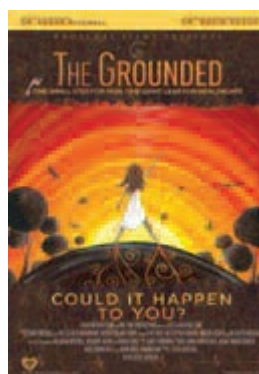
Compiled by Duncan Roads



Project Censored The Movie
by Project Censored and Hole In The Media Productions © 2013
Running time: 65mins
Available: www.ProjectCensored.org
www.yekra.com/project-censored

Project Censored is a media watchdog group which encourages college students to enrol in its courses and learn how to become citizen journalists.

Filmmakers Christopher Oscar and Doug Hecker were inspired, as two fathers from California, to take Project Censored on the road and create a documentary that explores why the corporate media fails to report the truth. They spent six years making this inspiring film, which features noted critics such as Noam Chomsky, Daniel Ellsberg, Cynthia McKinney, Greg Palast, John Perkins and Howard Zinn. The result is a beautiful film by two regular family men who decided it was time to take on the corporate media giants.

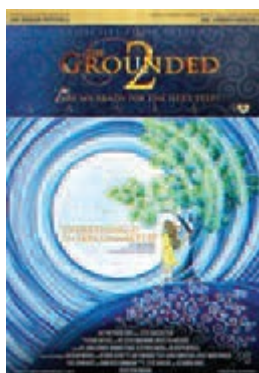


The Grounded
by Kroschel Films © 2014
Running time: 75mins
Available: www.kroschelfilms.com

This is the true tale of an Alaskan wildlife filmmaker's persistent curiosity and quest to test the claims of an outrageously simple healing his fellow townsfolk in Haines, Alaska, many of whom suffer from major pain or disabling conditions.

Starting with his own pain relief, he witnesses and films a surprising and miraculous healing in the town, generated by simply grounding people to the earth.

The news of this healing has drawn the attention of Apollo astronauts who walked on the Moon, as well as doctors and scientists.



The Grounded 2
by Kroschel Films © 2014
Running time:75mins
Available: www.kroschelfilms.com

The sequel to *The Grounded* continues the incredible, true tale of how "grounding" or "earthing" continues to transform the health and wellbeing of the people of Haines, Alaska, and other people and communities across the USA and Canada.

Filmmaker Steve Kroschel delves deeply into the science of what grounding does to the human body, and he reveals what critics try to do to discredit this astoundingly simple solution to humanity's pain and suffering. Kroschel asks: does nature offer a simple alternative to agony, and are millions of people wasting their time and money in the wrong places for relief?

This transformational film will make you reassess how you regard planet Earth, and give you a new and deeper meaning to being truly *alive*.

These two highly unusual and eye-opening movies will change the way you look at the very earth beneath your feet. We can all "heal for free"!

MUSIC

Reviewed by Richard Giles



Winds Of Samsara
by Wouter Kellerman and Ricky Kej
Kellerman Music CC, South Africa, 2014 (78mins)
Distributors: Australia—Phoenix Dist.,
www.phoenixdistribution.com.au
USA — www.winds ofsamsara.com

Wouter Kellerman is an award-winning flute player from South Africa (see NEXUS 20/06, 21/01). Ricky Kej is a US-born Indian composer, musician and producer who works with traditional and cutting-edge technologies. Together they draw from two cultures and meld their creative influences into a wonderful sound experience. *Winds of Samsara* reflects themes of peace and positivity, and has pieces dedicated to Nelson Mandela and Mahatma Gandhi. Said Kellerman: "Making this album challenged us as artists to push borders aside and have the one common thread through the universal language of music... and we've used instruments in unexpected ways, such as a dobra, pedal steel guitar and complete string sections playing in classical Indian styles." *Winds...* was recorded in six countries, with full orchestras on most tracks and choirs in Australia, India and the USA. An outstanding track is "Nocturne¹ (Chopin's Nocturne in C# minor), a version of sublime beauty. The album went to number one on Billboard's New Age chart as soon as it was released in the USA in July. This is a life-changing album which deserves playing-time right across the planet.

A must-have masterwork for your collection and to share with friends.

New Earth Alchemy
by Maia ShaWoMan
Voice of the New Earth, Australia, 2014 (60mins)
Distrib: www.voiceofthenewearth.com

You may recall Maia ShaWoMan, whose albums with Samjjana were reviewed in 18/04 and 19/02. Here, again, she plays the hang, a Swiss-developed percussion instrument (the result of years of research on the steel pan) which is played with the hands and looks like a UFO. She also plays a range of instruments such as gongs, gamelan, ghatam, drums and bells. New *Earth Alchemy* is designed for deep listening and includes sounds of nature as well as alchemy bowls. Transformational music.

Last Dance
by Keith Jarrett and Charlie Haden

ECM Records, Germany, 2014 (55mins)
Distributors: Aust—Fuse Music, tel (02) 9699 7555;
Germany—ECM Records, www.ecmrecords.com
USA— Universal Music, universalmusic.com/

It's not often that I review jazz CDs, but this one is notable as it may be the last one featuring Charlie Haden, the legendary American jazz double bass player who died in July. He was known for his long association with saxophonist Ornette Coleman and pianist/composer Keith Jarrett. Released in June, just before Haden's passing, *Last Dance* is a collaboration which Jarrett and Haden recorded in 2007 (along with their joint album *Jasmine*, which came out in 2010) after a 30-year gap in their partnership. It's a collection of tunes from the Great American Songbook, including works by Thelonius Monk, Cole Porter and Ira Gershwin. It's a most intimate jazz classic, cool and very relaxing.

Cartoons

by Phil Somerville

